

GRAIN DEALERS JOURNAL

Devoted to the construction and operation of better grain handling plants.

Talk Better Business and Help Improve It.

Don't inflict your troubles upon your customers. Each has his own private stock of pet troubles. But even if they didn't have, your hard-luck story is bound to make the outlook so gloomy they will involuntarily tighten their purse strings and reduce their purchases.

One hears so much talk of death, disease and disaster in every-day conversation it's a wonder any one ever smiles.

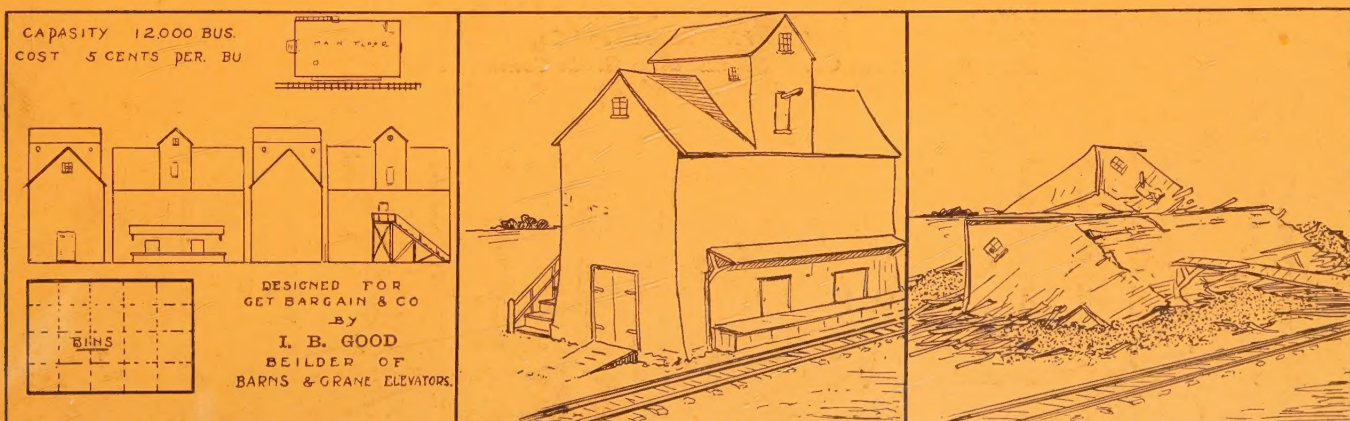
Smiles open the heart and the purse, and make business better. The things to talk about, if you want to be sociable with your customers and at the same time help your business, are health, hope, and happiness. Thoughts of success, sunshine, prosperity, and good crops make business hum.

Most people are so glad, for even a moment, to get away from thoughts of ruin,

debt, high taxes, high living cost, suffering, and the uncertainty of life that they just naturally gravitate from the gloomy crape-hanger to the cheerful fellow with a smile and a pleasant word.

Don't tell of your losses. Better still, forget them. Constant thinking about them will only turn your gloomy thoughts into gloomy manner and action. You will cease to plan aggressively or to act energetically. Your office will soon reflect your blue spirit, and you'll find your trade going elsewhere.

A new crop is being planted. Cheer up your patrons and you'll gear up your trade. Tell your customers how much more easily and more efficiently you will handle their big crops with the modern improvements you have planned.



In the Spring the Grain Man's Fancy Brighly Turns to Thoughts of Better Handling Facilities.

Do You Know

that—

—Milwaukee's grain receipts average about 80,000,000 bushels annually?

—21,000,000 tons of freight are moved into and out of Milwaukee annually?

—Milwaukee elevators can store 15,000,000 bushels of grain?

—the receipts of coal at Milwaukee are 5,000,000 tons annually?

—Milwaukee is one of the largest clover seed markets in the United States?

—Milwaukee is the second largest primary corn market in the United States?

—Ocean steamers sail from Milwaukee direct to the ports of Europe?

—50% of the grain received in Milwaukee is consumed or ground here by mills?

*Kellogg Seed Co.
Donahue-Stratton Co.
Flanley Grain Co.
E. P. Bacon Co.
Henry Rang & Co.
Franke Grain Co.
Taylor & Bournique Co.
Blanchard Grain Co.*

*Runkel & Dadmun
Bush Grain Co.
Cargill Grain Co.
W. M. Bell Co.
Lamson Bros. & Co.
Froedtert Grain & Malting Co.
Milwaukee Seed Co.
Milwaukee Grain Commission Co.*

MILWAUKEE

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them.

AMARILLO, TEXAS.

Early Grain & Elvtr. Co., wholesale grain.*
Stone & Co., Lester, wholesale grain.*

ATCHISON, KANS.

Moore-Lawless Grain Co., consgts., futures, pvt. wires.*

ATLANTA, GA.

Commercial Exchange Members.

Haym & Sims, successors to
Gregg & Son, J., wholesale brokers, grain, hay.*

BALTIMORE, MD.

Chamber of Commerce Members.

Baltimore Grain Co., grain receivers, exporters.*
Dennis & Co., grain merchants.
England & Co., Inc., Chas., grain, hay.*
Fahy & Co., John T., grain receivers and exporters.*
Gill & Fisher, receivers and shippers.*
Hammond, Snyder & Co., Inc., receivers, exporters.*
Hax & Co., G. A., grain, hay, seeds.*
Jones & Co., H. C., receivers, shippers, exporters.*
Lederer Bros., grain receivers.*
Robinson & Jackson, grain commission merchants.*
Steen & Bro., E., grain receivers and exporters.*

BEAVER, OKLA.

Horne Grain Co., Texas wheat, barley, milo.

BIRMINGHAM, ALA.

Montgomery Brokerage Co., grain, gr. pdts., hay, mdse.
Western Grain Co., mfrs. mxd. feed, crn. meal, grits.*

BLOOMINGTON, ILL.

Hasenwinkle Grain Co., brokers of country grain.

BOSTON, MASS.

Chamber of Commerce Members.

Benzaquin, Matthew D., grain brokerage commission.*

BUFFALO, N. Y.

Corn Exchange Members.

Armour Grain Co., grain merchants.*
Burrs Grain Co., grain commission.*
Churchill Grain & Seed Co., receivers, shippers.*
Davis, Inc., A. C., grain.*
Doorty-Ellsworth Co., Inc., brokerage commission.*
Electric Grain Elevator Co., consignments.*
Globe Grain Co., receivers & shippers.*
Harold, A. W., grain, barley a specialty.
Lewis Grain Corp., receivers & shippers.*
McConnell Grain Corporation, commission merchants.*
McKilien, Inc., J. G., receivers and shippers.*
Pratt & Co., receivers, shippers of grain.*
Ratcliffe, S. M., commission merchant.*
Seymour-Wood Grain Co., consignments.*
Sunset Grain & Feed Co., grain & feed.*
Taylor & Bourne Co., grain merchants.*
Traders & Producers Supply Co., millfeeds a specialty.
Townsend Ward Co., The, consignments.*
Watkins Grain Co., consignments.*
Whitney & Gibson, consignments.*

CAIRO, ILL.

Board of Trade Members.

Cairo Grain Commission Co., consignments.*
Halliday Elevator Co., grain dealers.*
Lynch Grain Co., grain dealers.*
Thistlewood & Co., grain and hay.*

CARROLLTON, MO.

Claiborne Commission Co., commission merchants.*

CEDAR RAPIDS, IOWA.

Cedar Rapids Grain Co., corn and oats.*
Gifford Grain Co., grain and grain products.*
King Wilder Grain Co., grain shippers.*

CHATTANOOGA, TENN.

Board of Trade Members.

Hood Feed Co., flour, feeds, field seeds.

CHICAGO, ILL.

Board of Trade Members.

Anderson & Co., W. P., grain commission merchants.*
Armour Grain Co., grain buyers.*
Bailey & Co., E. W., grain commission merchants.*
Bartlett-Frazier Co., grain merchants.*
Brennan & Co., John E., grain commission merchants.*
Carhart Code Harwood Co., grain commission.*
Dole & Co., J. H., grain and seeds.*

CHICAGO, ILL., (Continued).

Freeman & Co., Henry H., grain, hay, straw.
Gerstenberg & Co., commission merchants.*
Harris, Winthrop & Co., grain commission.*
Hitch & Carder, commission merchants.*
Hoit & Co., Lowell, commission, grain and seeds.
Lamson Bros. & Co., consignments solicited.*
Leland & Co., E. F., grain and seeds.*
McKenna & Dickey, commission merchants.*
Mumford & Co., W. R., grain, hay, millstuffs.*
Norris Grain Co., grain merchants.*
Paynter, H. M., grain and field seeds.
Pope & Eckhardt Co., grain and seeds.*
Press & Co., W. G., grain, provisions, stocks, etc.
Requa Bros., wheat a specialty.
Rumsey & Co., grain commission.*
Sawyers Grain Co., consignments.*
Schiffin & Co., P. H., commission.*
Shaffer Grain Co., J. C., grain merchants.*
Somers, Jones & Co., grain and field seeds.*
Updike Grain Co., consignments.*

CINCINNATI, O.

Grain & Hay Exchange Members.

Early & Daniel Co., grain; hay, feed.*
Gale Grain Co., The A. C., receivers & shippers.*

CLEVELAND, O.

Grain & Hay Exchange Members.

Bailey, E. I., grain and millfeed.*
Cleveland Grain & Milling Co., The, recvrs. & shprs.*
Gates Elevator Co., The, receivers and shippers.*
Sheets Elevator Co., The, grain, hay, straw.*
Shepard, Clark & Co., grain merchants.*
Strauss & Co., H. M., receivers, shippers hay & grain.*

COLBY, KANSAS.

Harris & Haynes, wholesale—brokers—grain.

CLOVIS, N. MEX.

Western Elvtr. Co., The, revrs.-shprs. hdqtrs kafir-milo.*

DAVENPORT, IOWA.

Davenport Elevator Co., receivers and shippers.*

DALHART, TEXAS.

Kinard Grain Co., J. C., wholesale grain & hay.*

DECATUR, ALA.

Lyle-Taylor Grain Co., whlse. grain, hay, feeds.

DECATUR, ILL.

Baldwin & Co., H. I., grain dealers.*

DENVER, COLO.

Grain Exchange Members.

Ady & Crowe Merc. Co., The, grain and hay.*
Ashcraft Grain Co., S. B., wholesale grain.*
Conley-Ross Grain Co., The, grain and beans.*
Crescent Flour Mills Co., The, merchant millers.*
Denver Elevator, wholesale grain, flour, millfeed.*
Farmers Elevator Co., The, H. F. Rover, Mgr.
Gallagher Grain Co., grain merchants.*
Houlton Grain Co., wholesale grain.*
Kellogg Grain Co., O. M., receivers and shippers.*
McCaull-Dinsmore Co., wholesaler and commission.*
Moore-Lawless Grain Co., private wires to all markets.*
PHELPS Grain Co., T. D., wholesale grain.*
Rocky Mountain Grain Co., export and domestic grain.*
Summit Grain Co., wheat, corn, oats, rye, barley.*

DES MOINES, IOWA.

Board of Trade Members.

Des Moines Elvtr. & Gr. Co., oats a specialty.
Iowa Corn Products Co., receivers and shippers.
Marshall Hill Grain Co., grain commission.*
Taylor & Patton Co., corn and oats.*

DETROIT, MICH.

Board of Trade Members.

Dumont, Roberts & Co., receivers, shippers.*
Huston, C. B., grain and hay.*
Lapham & Co., J. S., receivers & shippers.*
Lichterberg & Son, oats, corn, hay, straw.*
Simmons & Co., F. J., grain and hay.*
Swift Grain Co., consign or ask for bid.*

FORT WORTH, TEX.

Grain and Cotton Exchange Members.

Dorsey Grain Co., merchants—commission, consignments.
Transit Grain & Com. Co., consignments, brokerage.*
GREAT FALLS, MONTANA.

Barkemeyer Grain & Seed Co., grain dealers.*

GREENVILLE, O.

Grubbs Grain Co., E. A., track buyers.*

HAMBURG, IOWA.

Sullivan & McBride S. & G. Co., red cob fodder corn.

HASTINGS, NEBR.

Koehler-Twiddle Elevator Co., grain dealers.*

HATTIESBURG, MISS.

Merchants Grocery Co., whlse. grocers, grain, fd., dr.

HOUSTON, TEX.

Gulf Grain Co., grain, hay, millfeed.*
Rothschild Co., S., grain, c/s products, rice b/p.*

HUTCHINSON, KANS.

Board of Trade Members.

Central Grain Co., The, buyers for mills.
Farmers Co-op. Com. Co., commission merchants.
Goffe & Carkner, private wire.*
Hayes Grain Co., John, grain merchants.
Hutchinson Grain Co., grain merchants.*
McClure Grain Co., J. B., buyers and sellers.*
Midwest Grain Co., The, shippers.
Moore Grain Co., consignments—buyers of grain.
Producers Grain Co., The, milling wheat.*
Southwest Grain Co., receivers and shippers.
Union Grain Co., grain merchants.*
Vanderslice-Lynds Co., grain commission merchants.

INDIANAPOLIS, IND.

Board of Trade Members.

Anderson & Mercer, grain commission & consignments.*
Boyd Grain Co., Bert A., strictly brokerage & com.*
Cleveland Grain & Milling Co., grain commission.
Hayward-Rich Grain Co., grain commission.*
Steinhart Grain Co., commission and brokerage.*
Witt, Frank A., grain commission and brokerage.*

JACKSON, MICH.

Bartlett & Co., J. E., salvage grain buyers & sellers.
Wagner-White Co., track buyers-sellers, grain-feed.

JACKSON, MISS.

Field Co., Robt., succ. to P. L. Brittain Co.
Royal Feed & Mfg. Co., mixed feed mfrs.

KANSAS CITY, MO.

Board of Trade Members.

Christopher & Co., B. C., kafir, feterita, milo.*
Claiborne Commission Co., commission merchants.*
Croysdale Grain Co., commission merchants.
Davis Grain Co., A. C., grain commission.
Denton Kuhn Grain Co., consignments.*
Ernst Davis Grain Co., commissions.*
Federal Grain Co., receivers, shippers.*
Frisco Elevators Co., grain merchants.
Goffe & Carkner, grain commission.*
Hall-Baker Grain Co., consignments.
Lichtig & Co., H., kafir, milo, screenings.
Lozan Bros. Grain Co., receivers and shippers.*
McCoy-Thomas Grain Co., consignments-futures.*
Miller Grain Co., S. H., consignments.
Moore-Lawless Grain Co., grain receivers.*
Moore-Seaver Grain Co., grain receivers.*
Norris Grain Co., grain merchants and exporters.*
Roehen Grain Co., E. E., consignments.
Root Grain Co., consignments and futures.*
Scouler Bishop Grain Co., receivers and shippers.*
Shannon Grain Co., consignments.
Simonds, Shields, Lonsdale Grain Co., grain.*
Smith-Weekes Bkg. Co., grain broker.
Thresher Grain Co., R. J., grain commission.*
Wilser Grain Co., consignments.*

LAWRENCE, KANS.

Underwood & Sons, J., grain, feed, seeds.

LIBERAL, KANS.

Light Grain & Mfg. Co., mill pdts., kafir, milo.
Vickers Grain & Seed Co., grain and field seeds.

LINCOLN, NEBR.

Grain Exchange Members.

Lincoln Grain Co., grain merchants.*

LITTLE ROCK, ARK.

Grain Exchange Members.

Caple & Stockton, hay, grain, feed.
Farmer Wilson Co., brokers, hay, grain, mill feed.*
Gordy Co., C. L., grain brok., hay, grain, mill feed.*
Wilson Co., John R., grain brokers.

(Continued on next page.)

*Member Grain Dealers National Association.

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

LOUISVILLE, KY.

Board of Trade Members.

Bingham-Hewett Gr. Co., receivers-shippers of grain.*
Callahan & Sons, receivers and shippers of grain.*
Fruchtenthal, Henry, grain, feed, hay.*
Kentucky Public Elevator Co., storers and shippers.*
Verboeff & Co., H., receivers and shippers.*
Zorn & Co., S., receivers and shippers.*

LYNCHBURG, VA.

Moon-Taylor Co. grain and hay brokers.

M'KINNEY, TEXAS.

Reinhart & Company, wheat, corn, oats, maize.*

MARSHALL, MO.

Claiborne Commission Co., commission merchants.*

MEMPHIS, TENN.

Merchants Exchange Members.

Davis & Andrews Co., grain, mixed feed.*

MILWAUKEE, WIS.

Chamber of Commerce Members.

Bacon Co., E. P., grain and seed.*
Bell Co., W. M., commission merchants.*
Blanchard Grain Co., "Always Dependable."*
Bush Grain Co., grain merchants.*
Cargill Grain Co., grain and seeds.*
Donahue-Stratton Co., dls. grain and feed.*
Flanley Grain Co., consignments solicited.*
Frankie Grain Co., feeds, grain, hay.*
Fraser-Smith Co., commission merchants.*
Froedtert Gr. & Malting Co., grain commission.*
Kamm Co., P. C., grain shippers.*
Lamson Bros. & Co., grain commission.*
Milwaukee Grain Commission Co., grain commission.*
Rang & Co., Henry, commission merchants.*
Runkel & Dammun, grain commission merchants.*
Taylor & Bournique Co., grain merchants.*
Udike Grain Co., consignments solicited.*

MERIDIAN, MISS.

Board of Trade Members.

Lyon & Co., A. J. whlse. gro., grain, feed.*
Meyer Bros., wholesale groc., grain, feed.*
Sturgis Co., grain dealers, mixed feed mfrs.*
Threefoot Bros. & Co., whlse. grain, feed, flr., gro.*

MIDDLEPOINT, OHIO.

Pollock Grain Co., grain, hay, straw, ear corn.

MIDDLETOWN, CONN.

Meech & Stoddard, Inc., grain, feed, hay, flour.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members.

Cargill Commission Co., grain commission.*
Cereal Grading Co., grain merchants.*
Hankinson & Co., H. L., grain commission.*
International Grain Co., grain merchants.*
Malmquist & Co., C. A., receivers & shippers.*
Marfield Grain Co., grain commission.*
McNeill Dinsmore Co., consignments solicited.*
Seidl, Frank J., all grains and feeds.*
Sheffield Elevator Co., shippers of grain.*
Sterling Grain Co., receivers and shippers, all grains.*
Van Dusen-Harrington Co., grain merchants.*

MOULTRIE, GA.

Delay, A. J., flour and grist mill.

NASHVILLE, TENN.

Grain Exchange Members.

Allen Grain Co., receivers and shippers.*
Allfeed Milling Co., feed manufacturers.*
Kerr, S. S., receiver and shipper.*
Tennessee Grain Co., receivers and shippers.*
Tyner & Co., John A., receivers and shippers.*

NEW CASTLE, PA.

Hamilton Co., grain, feed, flour, hay, potatoes.

NEW ORLEANS, LA.

Board of Trade Members.

Anderson & Jackson, Inc., exporters of grain.*
Fox Co., C. B., exporters.*
Nathan & Pettis, fwdg. agt. & expt. fght. broker.*
Rodd & Co., Chas. M., gr. brokers & fwdg. agents.*

NEW YORK CITY.

Produce Exchange Members.

Jones & Co., M. B., buyers—quote us.*
Knight & Company, commission merchants.*
Therrien, A. F., broker.

NORFOLK, VA.

Moon-Taylor Co., grain and hay brokers.

OKLAHOMA CITY, OKLA.

Grain Exchange Members.

Cherokee Grain Co., grain merchants.*
Conyers Grain Co., grain merchants.*
Lang Grain Co., J. H., prompt and efficient service.*
Langenberg Bros. Grain Co., grain merchants.*
Marshall Grain Co., grain, feed, seeds.*
Moore, George L., grain merchant.*
Okla. City M. & E. Co., grain merchants, millers.*
Perkins Grain Co., W. L., brokers.*

OKLAHOMA CITY, OKLA., (Continued).

Scannell-Winters Grain Co., grain and feed.*
Stinnett Grain Co., grain merchants.*
Stowers Grain Co., W. B., commission merchants.*
Strader Alexander Co., grain, hay, feed.*
White Grain Co.*

OMAHA, NEBR.

Grain Exchange Members.

Butler Welsh Grain Co., grain merchants.*
Crowell Elevator Co., receivers, shippers.*
Holmquist Elevator Co., receivers and shippers.*
Maney Grain Co., The, consignments.*
Miller Wilson Grain Co., receivers and shippers.*
Roberts Grain Co., Geo. A., grain merchants.*
Stockham Grain Co., E., commission merchants.*
Trans-Mississippi Grain Co., receivers and shippers.*
United Grain Co., grain commission.*
Udike Grain Co., consignments.*

OTTAWA, KANS.

Ross Milling Co., The, millers, hard wheat flour.

PAMPA, TEXAS.

McMurtry Grain Co., L. C., wheat, kafir, mlo.*

PEORIA, ILL.

Board of Trade Members.

Bartlett Co., S. C., grain commission.*
Bowen Grain Co., H. D., receivers & shippers.*
Cole Grain Co., Geo. W., receivers and shippers.*
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.*
Harrison, Ward & Co., receivers & shippers.*
Luke Grain Co., grain commission.*
McFadden & Co., G. C., consignments.*
Miles, P. B. & C. C., grain commission.*
Mueller Grain Co., receivers and shippers.*
Shaffer Grain Co., J. C., receivers & shippers.*
Turner Hudnut Co., receivers and shippers.*
Tyng Grain Company, receivers and shippers.*

PHILADELPHIA, PA.

Commercial Exchange Members.

Delp Grain Co., E. E., grain and millfeeds.*
Dunwoody Co., E. L., flour, grain, feed.*
Miller & Sons, L. F., grain, seeds, hay.*
Richardson Bros., grain, flour, millfeeds.*
Richardson, Geo. M., grain and feeds.*
Rogers & Co., E. L., hay, straw, grain, feed.*
Stites, A. Judson, grain and millfeed.*
Young & Co., S. H., wheat, corn, oats.*

PITTSBURGH, PA.

Members Grain and Hay Exchange.

Allen & Co., H. S., grain and hay.*
Burson Grain Co., C. G., recvrs. shprs.-commission.*
Elwood & Co., R. D., hay and grain.*
Foster Co., C. A., grain merchants.*
Geddel & Leubin, grain and hay.*
Hardman & Daker, grain, hay, millfeed.*
Harper Grain Co., corn a specialty.*
Heck & Co., W. P., grain, hay, millfeed.*
McCague, Ltd., R. S., grain, hay.*
Rogers & Co., Geo. E., grain and hay.*
Smith & Co., J. W., grain merchants.*
Stewart & Co., Jesse C., grain and mill feed.*
Walton Co., Samuel, grain and hay.*

PONTIAC, ILL.

Balbach, Paul A., grain buyer, all markets.

PORTLAND, ORE.

Pacific Coast Elevator Co., grain.*
Pacific Grain Co., grain exporters.*

PUEBLO, COLO.

McClelland Mct'l I. & R. Co., grain, hay and feed.*

QUINTER, KANSAS.

Jones-Rogers Grain Co., brokers.

RICHMOND, VA.

Grain Exchange Members.

Beveridge & Co., S. T., grain, hay, feeds, seeds.

ROCHESTER, N. Y.

Dailey Bros., Inc., receivers and shippers.*

SAGINAW, MICH.

Saginaw Milling Co., flour, feed, hay, grain.*

SALINA, KANS.

Board of Trade Members.

Bossemeyer Grain Co., The Paul, grain merchants.*
Freeman Grain Co., receivers and shippers.*
Hayes Grain Co., Always in the market.*
Richter Grain Co., wheat, coarse grains & millfeed.*
Rickel, E. L., grain receiver and shipper.*
Service Grain Co., grain, feed, grain products.*
Weber Flour Mills Corp., millers, exporters, grain dlsr.*

SALT LAKE CITY, UTAH.

Utah-Idaho Bkg. Co., whlse. grain, hay, flour, feed.*

ST. JOSEPH, MO.

Grain Exchange Members.

Aunt Jimima Mills Co., A. J., hominy feed.*
Button-Simmons Grain Co., grain commission.*
Claiborne Commission Co., commission merchants.*
Yancey Grain Co., commission merchants.*
Marshall Hall Grain Co., consignments solicited.*

SAN ANTONIO, TEXAS

King, Douglas W., wheat, corn-brok., Texas R. Oats.*

ST. LOUIS, MO.

Merchants Exchange Members.

Annan Burg G. & M. Co., flour, grain, millfeed.*
Claiborne Commission Co., commission merchants.*
Dreyer Commission Co., feedstuffs, grain, seeds.*
Elmore Schultz Gr. Co., receivers and shippers grain.*
Goffe & Carkner Co., grain commission.*
Graham & Martin Grain Co., grain commission.*
Marshall Hall Grain Co., grain commissions.*
Langenberg Bros. Grain Co., grain commission.*
Morton & Co., grain commission.*
Nanson Commission Co., grain commission.*
Picker & Beardsley Com. Co., grain and grass seed.*
Toberman, Mackey & Co., grain, hay, seeds.*
Turner Grain Co., grain commission.*

SEDALIA, MO.

Claiborne Commission Co., commission merchants.*

SIOUX CITY, IOWA.

Board of Trade Members.

Button Co., L. C., grain commission.*
McCaull Dinsmore Co., commission.*
Terminal Grain Corp., receivers & shippers.*
Rumsey & Co., receivers of consignments.*
Western Terminal Elevator Co., receivers and shippers.*

SIOUX FALLS, S. D.

Burke Grain Co., grain merchants.

SPRINGFIELD, MO.

Claiborne Commission Co., commission merchants.*

STERLING, COLO.

Moore, James A., grain dealer.

SUPERIOR, NEBR.

Bossemeyer Bros. Terminal Elevator.*
Elliott & Myers, grain merchants.*
Superior Terminal Elvtr. Co., grain, corn products.*

TAMPA, FLA.

Bonacker Bros., brokers, grain, hay, feed, flour.*

THOMASVILLE, GA.

Burch & Son, W. H., corn millers.

TOLEDO, OHIO.

Produce Exchange Members.

De Vore & Co., H. W., grain and seeds.*
King & Co., C. A., grain and seeds.*
Morehouse & Co., wholesale grain and seeds.*
Southworth & Co., grain and seeds.*
Wickenhiser & Co., John, grain receivers, shippers.*
Young Grain Co., grain.*

TOPEKA, KANS.

Derby Grain Co., wheat, corn, oats, and millfeed.*
Golden Belt Grain & Elvtr. Co., The, recvrs. & shprs.*
Topeka Grain Co., wheat, corn, oats, mill & ctn. feed.*

TULIA, TEXAS.

Cowan Grain Co., W. C., wheat, oats, maize, kafir.*

TURON, KANS.

Turon Mill & Elvtr. Co., corn, wheat, millfeed, flour.

WASHINGTON, D. C.

Wilkins-Rogers Mlg. Co., Inc., receivers and shippers.*

WICHITA, KANS.

Board of Trade Members.

Baker-Evans Grain Co., milling and export wheat.*
Beyer Grain Co., consignments and mill orders.*
Blood Grain Co., I. H., consignments, mill orders.*
Claiborne Commission Co., commission merchants.*
Clark Grain Co., C. M., all kinds grain and feed.*
Craig Grain Co., J. W., consignments and mill orders.*
Foot Grain Co., consignments.*
Hall Baker Grain Co., exporters.*
Hayes Grain Co., John, Okla.-Kan., wheat for mills.*
Hipple Grain Co., consignments.*
Kansas Flour Mills Co., receivers and shippers.*
Kramer Grain Co., receivers and shippers.*
Linton-Christy Grain Co., strictly brokerage & comm.*
Norris Grain Co., exporters.*
Raymond Grain Co., consignments.*
Simonds-Shields-Lonsdale Gr. Co., exporters.*
Smith-McLinden Grain Co., milling and export wheat.*
Stevens-Scott Grain Co., receivers and shippers.*
Strong Trading Co., wholesale grain and feed.*
Terminal Elevators, exporters.*
Wallingford Bros., receivers and shippers.*
Wichita Flour Mills Co., millers and grain merchants.*
Wichita Grain Co., receivers and shippers.*
Wichita Terminal Elev. Co., general elevator business.*

WICHITA FALLS, TEXAS.

Mytinger Grain Co., J. C., grain, feed, seeds.*

WINCHESTER, IND.

Goodrich Bros. Hay & Grain Co., whlrs. gr. and seeds.*

WINFIELD, KANS.

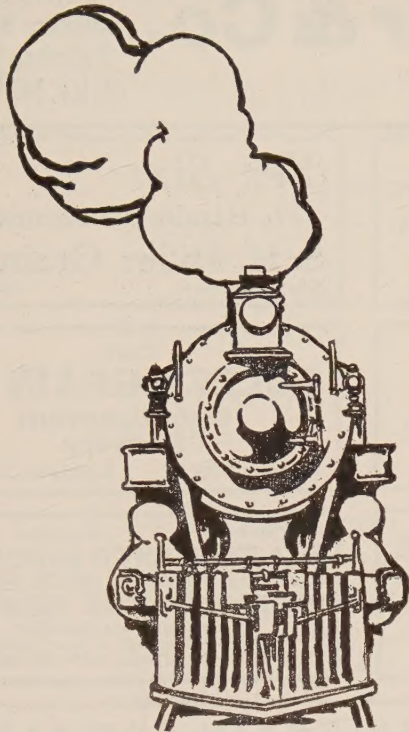
Daves & Daves, red mlg. wheat, mill feed.*

WOODWARD, OKLA.

Sharon Grain Co., wholesale grain.

*Member Grain Dealers National Association.

PITTSBURGH



MEANS THIS TO YOU

A GRAIN MARKET with something to offer, not merely a buying and reshipping point, but a large industrial and consuming city as well. Here, at the junction of the Allegheny, Monongahela and Ohio Rivers, is one of the foremost railroad centers of this country, giving grain shippers service not usually expected in these days of "Railroad Reconstruction." The members of the Pittsburgh Grain and Hay Exchange mentioned here are ready now to do their part.

R. D. Elwood & Co.
C. A. Foster Co.
Geidel & Leubin
W. F. Heck & Co.
Geo. E. Rogers & Co.
Harper Grain Co.

H. S. Allen & Co.
C. G. Burson Grain Co.
R. S. McCague, Ltd.
J. W. Smith & Co.
Samuel Walton Co.
Jesse C. Stewart Co.

Hardman & Daker

"Bill it to Pittsburgh"

Commercial Exchange
Members

PHILADELPHIA

Commercial Exchange
Members

S. H. YOUNG & CO.
WHEAT — CORN — OATS
417-19 Bourse Bldg.
CONSIGNMENTS

E. E. Delp Grain Co.
Elevator and Mills—Bourbon, Indiana
Eastern Office, Philadelphia, Pa.

RICHARDSON BROS.
BROKERS
WANT OFFERS
GRAIN FLOUR MILL FEED
Delivered Philadelphia
Either Export or Domestic
The Bourse

You Know

You want to do business with the grain shippers. Tell them so. The Grain Dealers Journal reaches them.

L. F. MILLER & SONS
Consignments Solicited
Receivers and Shippers of
GRAIN, FEED, SEEDS, HAY, ETC.
Office 2931 N. Broad St PHILADELPHIA, PA

A Kansas dealer, who advertised his elevator for sale in the Journal, at a stipulated price, received so many replies from prospective buyers he decided to keep it.

By mentioning the Grain Dealers Journal of Chicago when writing its advertisers you help it to more efficient work in improving grain trade conditions.

Board of Trade
Members**KANSAS CITY**Board of Trade
MembersHandling
Consignments
and Futures
43 Years**B. C. Christopher & Co.**

KANSAS CITY, MO.

Buyers and
Shippers Kaffir,
Feterita, Milo
Maize, Mill Feed**SHANNON GRAIN COMPANY**
CONSIGNMENTS

201-2 Board of Trade KANSAS CITY, MO.

Buyers—Sellers
WHEAT . CORN
OATS . BARLEY
CONSIGNMENTS
MILL ORDERS**Yes Sir:**Real
ServiceWe Handle Consignments
S. H. Miller Grain Co.
Kansas City Missouri**HALL-BAKER GRAIN CO**Buyers and Sellers of Grain
CONSIGNMENTS

Kansas City - - Missouri

- First in Enterprise!
- First in Advertising!
- First in Circulation!
- First in News!

The Grain Dealers Journal

TRY
FULLER GRAIN CO.
**Consignment
Service**

Kansas City Atchison, Kansas

FEDERAL GRAIN CO.

Real Service on Consignments

Buyers and Sellers of
Wheat, Corn, Oats, Barley,
Kafir and MiloOperators 1,500,000 BU.
MURRAY ELEVATORBOARD OF TRADE KANSAS CITY, MO.
U. S. A.**Simonds-Shields-Lonsdale
Grain Co.**

QUALITY and SERVICE

Kansas City, Missouri

R. J. THRESHER EBENEZER S. THRESHER
R. J. THRESHER GRAIN CO.
Successors to THRESHER FULLER GRAIN CO.
GRAIN COMMISSION MERCHANTS
Consignments Solicited
Grain Bought and Sold for Future Delivery
311-314 Board of Trade, KANSAS CITY, MO.**MOORE-LAWLESS GRAIN COMPANY**Consignments—Futures
KANSAS CITY, MO.Branch Offices: Atchison, Kansas—Denver, Colorado
Members: Kansas City, Chicago, St. Louis, Atchison and Denver Exchanges**CONSIGN****Ernst-Davis Com. Co.**

Kansas City

**SPECIAL ATTENTION
GIVEN TO FUTURES**MEMBERS
Kansas City Board of Trade
Chicago Board of Trade
St. Louis Merchants Ex.**Drive**Your business. Hitch up with an
add in the Grain Dealer's Journal.
You will then have a pleasant and
profitable ride.**A. C. DAVIS GRAIN CO.**
Grain CommissionMill Orders a Specialty
Consignments and Future Orders Solicited
KANSAS CITY, U. S. A**Want an Elevator?**Then consult the "Elevators
for Sale" columns in this issue
of the Grain Dealers Journal.Chamber of Commerce
Members**BALTIMORE**Chamber of Commerce
Members

Receivers, Shippers, Exporters

H. C. JONES & CO.
BALTIMOREGrain and Hay
Consignments or Direct Purchases**CONSIGNMENTS A SPECIALTY**
JOHN T. FAHEY & CO.Commission Merchants
Grain Receivers and Shippers
In the Market every day
Remember us on Rye BALTIMORE, MD.

Established 1900

G. A. HAX & CO.
COMMISSIONGrain and Hay
BALTIMORE MARYLAND**Chas. England & Co. Inc., Grain-Hay-Seeds**
Commission Merchants - 308-310 Chamber of Commerce, BALTIMORE**GILL & FISHER**Grain Receivers and Shippers
BALTIMORE**Baltimore Grain Co.**Consignments
Baltimore Maryland**Put Your Name**where every progressive
grain dealer will see it
and keep it there.

THAT IS IN THE

Grain Dealers Journal
OF CHICAGO

HUTCHINSON

is the best place to buy and to sell hard winter wheat—that premier of all bread-flour grains.

Consignments to the Hutchinson market produce gratifying returns for those shippers who are located in the territory Hutchinson serves; while millers' buying orders yield supplies that make the customer come back for "another sack of that good flour."

Use Hutchinson—whether you buy or sell. Any of these members of the Board of Trade will serve you:

*Southwest Grain Co.
John Hayes Grain Co.
Hutchinson Grain Co.
J. B. McClure Grain Co.
Farmers Co-operative Com. Co.*

*The Producers Grain Co.
Goffe & Carkener
Union Grain Co.
The Midwest Grain Co.
The Central Grain Co.*

Grain Exchange
Members

ST. JOSEPH

Grain Exchange
Members

MARSHALL HALL GRAIN CO.

One of the best in the grain trade with experienced organization, best grain handling facilities and up-to-date methods.

OPERATOR MARSHALL HALL GRAIN ELEVATOR, MILLION BUSHEL CAPACITY

ST. JOSEPH, MO.

The great and growing market in the corner of four GREAT GRAIN states

This combination means SUCCESS AND SATISFACTION to all OUR TRADE!

MARSHALL HALL GRAIN CO.

ST. JOSEPH, MO.

AUNT JEMIMA MILLS COMPANY
ST. JOSEPH, MO.
Manufacturers
A. J. HOMINY FEED

Button-Simmons Grain Co.

B-S

BETTER SERVICE
St. Joseph, Mo.

Clark's Car Load Grain Tables

Eighth edition, revised and enlarged, shows the following range of reductions of pounds bushels by fifty pound breaks.

20,000	to 107,950 lbs.	to 32 lb. bushels
20,000	" 74,950	" " 34 " "
20,000	" 96,950	" " 48 " "
20,000	" 118,950	" " 56 " "
20,000	" 118,950	" " 60 " "

Pounds printed in red ink; bushels in black. Linen ledger paper reinforced with muslin, bound in flexible karatol, marginal index. Price \$2.50.

GRAIN DEALERS JOURNAL
305 So. La Salle Street CHICAGO, ILL.

Certain Departments

in this number of the GRAIN DEALERS JOURNAL are especially interesting. After you have read them, consider carefully whether you are not better off with the twenty-four numbers of the Journal, on your desk, or the \$2.00 in your pocket.

Board of Trade
Members**CAIRO**Board of Trade
Member**CORN****Halliday Elevator Company**
GRAIN DEALERS
CAIRO, ILL.**OATS**Merchants Exchange
Members**ST. LOUIS**Merchants Exchange
Members**TOBERMAN, MACKAY & CO.**
GRAIN-HAY-SEEDS
FASTEST GROWING COMMISSION HOUSE IN AMERICA
SAINT LOUISH. A. VON RUMP
Prop.O. H. SCHWARZ
Asst.**Von Rump Grain Co.**

WHEAT-CORN-OATS

Grain Commission

St. Louis

C. W. OUTHIER
Iowa Branch
Prescott, Iowa416-421
Merchants
Exchange**PICKER & BEARDSLEY COM. CO.**

"THE CONSIGNMENT HOUSE OF ST. LOUIS"

GRAIN, HAY, GRASS SEEDS, KAFIR, MILO
125 MERCHANTS EXCHANGE BLDG. ST. LOUIS, MO.JOHN SCHULTZ
PresidentV. C. ELMORE
Vice-PresidentJOHN H. HERRON
Secretary and Treasure**ELMORE-SCHULTZ GRAIN COMPANY**
EXPERT—SERVICE—GIVEN—CUSTOMERS

105-107 Merchants Exchange

ST. LOUIS

*It is better to have shipped to us than to wish you had***Nanson Commission Co.** GRAIN, HAY and SEEDS
202 Merchants Exchange Bldg., ST. LOUIS, MO.**This space
is yours**

If you are the first to apply for it.

Established 1877

Langenberg Bros. Grain Co.

St. Louis

New Orleans

Consignments
and
Futures**CLAIBORNE COMMISSION CO.**113 No. Fourth St.
ST. LOUIS
MO.*"One car leads to another"*

Every time you mention the

GRAIN DEALERS JOURNALto an advertiser, you
help to make it bigger and better.Grain Exchange
Members**SIoux CITY**Grain Exchange
Members**L. C. BUTTON CO.**
510-511 Grain Exchange SIOUX CITY, IOWA
**General Grain and
Commission Business**
USE US**RUMSEY & COMPANY**
Sioux City Chicago
Grain Business in All Branches**Terminal Grain Corporation**
RECEIVERS and SHIPPERS
Consignments Solicited
SIOUX CITY, IOWA**Chick and Poultry Foods**
Ask for rices on these and all
other wheat, corn and oat feeds
AKRON MILLING CO.
Manufacturers
SIOUX CITY, IOWA**C. N. D. QUOTATIONS**We have enlarged upon our old form
of recording C. N. D. quotations and now
have a new book which, in addition to
having spaces for Wheat, Corn and Oats,
also has spaces for Rye and Barley.Each sheet is headed "Board of Trade
Quotations for Week Commencing Mon-
day.....192...." Columns are pro-
vided for three Wheat options, three
Corn, three Oats, three Rye and two
Barley; have spaces for the market
hourly and at close. Closing prices for
previous week are listed at top.Sixty sheets, printed on bond paper,
9 1/2 x 11 1/2", are well bound in book form,
with flexible pressboard covers—a year's
supply. Order Form 97-5. Price \$1.00.**GRAIN DEALERS JOURNAL**
305 South LaSalle St. Chicago, Ill.

DENVER

is in position to give you gratifying returns on your grain shipments. The extra effort shown by the Denver Grain Exchange Members is responsible for so many new customers becoming old customers. You owe it to your business to try Denver service.

You can learn more about this paramount service by getting into communication with any of the Grain Exchange Members listed here. They welcome all inquiries.

The Ady & Crowe Mercantile Co.

Grain, Hay, Beans.

Denver Elevator

Wholesale Grain, Flour and Mill Feed.
We operate 30 elevators in Eastern Colorado.

Houlton Grain Company

Wholesale Grain—Get in touch with us.

O. M. Kellogg Grain Co.

Receivers and shippers of all kinds of Grain.

McCaull-Dinsmore Co.

Grain—Wholesaler and Commission.

The Farmers Elevator Co.

(F. C. Ayres Merc. Co., Owners)
H. F. Rover, Mgr. 614 Cooper Bldg.

T. D. Phelps Grain Co.

Wholesale Grain and Beans.

The Summit Grain Co.

Receivers and shippers of all kinds of grain.
Wire or phone us.

The Conley-Ross Grain Co.

Wholesale Grain and Beans.

The Crescent Flour Mills

Merchant Millers and Wholesale Grain.

Moore-Lawless Grain Co.

Kansas City, Denver and Atchison.
Private wires to all markets. Hedging orders solicited.

Rocky Mountain Grain Co.

Grain Merchants—Export and Domestic.

Chamber of Commerce
Members

MINNEAPOLIS

Chamber of Commerce
Members

CONSIGNMENTS
SOLICITED

INTERNATIONAL GRAIN CO.

COMMISSION
MERCHANTS

We Are Always in the Market for Wheat

FLOUR EXCHANGE BLDG.

MINNEAPOLIS, MINN.

MARFIELD GRAIN CO.

Receivers and Shippers

SHEFFIELD ELEVATOR COMPANY MINNEAPOLIS

GRAIN SHIPPERS
Ask for Samples of Milling Wheat, Feed and
Milling Barley
WRITE FOR QUOTATIONS

Cereal Grading Co.

GRAIN MERCHANTS

We buy, sell, store and ship
all kinds of grain. Get our
offers, or try us with your
consignments.

LIBERAL ADVANCES

Operators of Elevator "R"

Chamber of Commerce
MINNEAPOLIS

CARGILL COMMISSION COMPANY

DULUTH

MINNEAPOLIS

MILWAUKEE

EFFICIENCY is our watchword; SATISFACTION your reward

SHIP TO CARGILL

"You can't do better; You might do worse."

CORN -- OATS -- BARLEY -- RYE
For Prompt Shipment in any
Quantity
VAN DUSEN
The HARRINGTON CO.
MINNEAPOLIS DULUTH

J. L. McCaull, Pres. R. A. Dinsmore, Vice-Pres.
S. J. McCaull, Sec. A. M. Dinsmore, Treas.
The McCaull-Dinsmore Co.
COMMISSION MERCHANTS
915-16-19 Chamber of Commerce
MINNEAPOLIS, MINN.
Duluth Milwaukee Omaha

CIPHER CODES

We carry the following cipher codes in stock
and can make prompt delivery

Universal Grain Code, board cover... \$1.50
Universal Grain Code, flexible leather. 3.00
Robinson's Cipher Code, leather..... 2.25
A. B. C. Code, 5th Edition..... 18.00
Baltimore, Export Cable Code..... 15.00
Companion Cable Code..... 5.00
Miller's Code (1917)..... 2.00
Cross Telegraphic Cipher Code..... 2.00

Your name in gilt letters on front cover,
35 cents extra

For any of the above, address

GRAIN DEALERS JOURNAL
309 So. La Salle St. Chicago, Ill.

SALINA KANSAS

Salina's location, geographically, is a potent reason why the city has become a prominent grain market and milling center. Located on the main line of the Missouri Pacific Railroad, it is reached by four other roads as well, the Rock Island, Union Pacific, Santa Fe and Salina Northern.

These excellent shipping facilities, together with the excellent quality of milling wheat produced in this section, should induce you to make desirable connections with any of the following firms, all

SALINA BOARD OF TRADE MEMBERS

Weber Flour Mills Corp.

Millers, Exporters, Grain Dealers.

Richter Grain Co.

Wheat, Coarse Grains and Millfed.

Freeman Grain Co.

Receivers and shippers.

Service Grain Co.

Grain, Feed and Grain Products.

E. L. Rickel—Grain

Receiver and Shipper.

John Hayes Grain Co.

Always in the market.

The Paul Bossemeyer Grain Co.

Merchandisers of Milling and Export Wheat.

Corn Exchange
Members

BUFFALO

Corn Exchange
Members



BUFFALO GRAIN COMPANY

Receivers, Forwarders and Commission
Consignments Solicited

Est. 1903

Barley a Specialty

Ship Us Your Corn, Oats and Wheat

Regardless Of Its Condition

We operate the Superior Elevator equipped with all modern machinery for handling grain

PRATT & CO.

OPERATORS OF
SUPERIOR ELEVATOR

910 Chamber of Commerce, Buffalo, N. Y.

A. W. HAROLD GRAIN BARLEY A Specialty

717 Chamber of Commerce

BUFFALO, N. Y.

Electric Consignment Service

A reliable service designed to meet the requirements of shippers to the Buffalo Market. We solicit your shipments.

ELECTRIC GRAIN ELEVATOR CO., BUFFALO

When you see it in the
JOURNAL
help us by saying so

Grain Exchange
Members

OMAHA

Grain Exchange
Members



CONSIGNMENTS SOLICITED MILLER-WILSON GRAIN CO. GRAIN MERCHANTS

200-201 GRAIN EXCHANGE

OMAHA

RECEIVERS & SHIPPERS

CROWELL ELEVATOR COMPANY

Receivers and Shippers

GRAIN

Consignments Solicited
OMAHA

Grain Shippers

and in fact all grain men who are wide awake and on the alert to get onto all the ins and outs of the grain business, subscribe for and read the Grain Dealers Journal.



Buyers and
Sellers

WHEAT, CORN
OATS

TWO Terminal
Elevators

Million bushel
capacity

CHOICE MILLING WHEAT

CONSIGNMENTS

When writing advertisers mention the Grain Dealers Journal of Chicago which works to improve your trade conditions. By so doing you help it and your own business.

WICHITA

has long been recognized as the leading market of the Great Southwest. Millers and Exporters when in need of the best quality wheat invariably turn to Wichita to supply their needs. Country Grain Shippers are offered an exceptional service on their grain shipments. Buyers and Sellers of grain should make a Wichita connection. Communicate with any of these firms:

Smith-McLinden Grain Co.,
Milling and Export Wheat, Mill Feed and Coarse Grains

The Kramer Grain Co.,
Wholesale Grain and Feed

Terminal Elevators,
(J. Rosenbaum Grain Co.)
Exporters—Private wires to all markets

The J. W. Craig Grain Co.,
Milling Wheat

Linton-Christy, Brokers,
No trades for our own account

Hall Baker Grain Co.
Exporters and Merchandisers

Wallingford Bros.,
Export and Domestic Grain

Raymond Grain Co.,
Milling and Export Wheat

Norris Grain Co.,
Exporters

Claiborne Commission Co.,
Consignments and Futures

Wichita Flour Mills,
Millers and Grain Merchants

Stevens-Scott Grain Co.,
Receivers and Shippers

The Baker-Evans Grain Co.,
Milling and Export Wheat, Coarse Grains and Millfeed

Simonds-Shields-Lonsdale Gr. Co.,
Exporters—Good Milling Wheat

Beyer Grain Co.,
Consignments and Mill Orders

Foot Grain Co.,
Consignments and Mill Orders

I. H. Blood Grain Co.,
Receivers and Shippers
Special attention given to buying wheat for mills

Wichita Terminal Elevator Co.,
General Grain and Elevator Business

Board of Trade
Members

PEORIA

Board of Trade
Members

MUELLER GRAIN COMPANY
Receivers and Shippers
GRAIN
Consignments Solicited. Track Bids Made on Request
Room 39 Chamber of Commerce, Peoria, Ill.

Universal Grain Code

Designed especially to reduce the telegraph tolls, to prevent expensive errors and to protect the business of grain dealers and millers. Its 150 pages contain 14,910 code words and no two spelled near enough alike to cause an error. Includes Supplement of code words for the new Federal wheat, corn and oats grades.

Code is 4½x7 inches, printed on policy bond, bound in black flexible leather. Price \$3.00.

You can greatly reduce your telegraph tolls by using the Universal. Try it.

Grain Dealers Journal
309 So. La Salle St. Chicago, Ill.

P. B. and C. C. Miles

Established - 1875
Incorporated - 1910

Peoria, Illinois

Handling Grain on Commission Our Specialty

H. D. BOWEN GRAIN CO.
Receivers and Shippers
CONSIGNMENTS
18 BOARD OF TRADE, PEORIA, ILL.

G. C. McFADDEN & CO.
Merchandisers of Grain
Shippers of Corn and Oats
Members Chicago Board of Trade PEORIA, ILL.

J. C. SHAFFER GRAIN CO.
RECEIVERS and SHIPPERS
GRAIN CHICAGO
No. 9 Jefferson Building, PEORIA, ILL.
Branches: Rochelle, Streator, Bloomington, Springfield, Hoopeston

Turner-Hudnut Company
Receivers **GRAIN** Shippers
42-47 Board of Trade

Peoria offers a strong outlet for
NEW CORN
W. W. DEWEY & SONS
COMMISSION MERCHANTS
26 CHAMBER OF COMMERCE, PEORIA, ILL.

Elevator Equipment

Tell us what you need for your Grain Elevator and we'll tell you where to get it. We make no charge whatever for this service.

GRAIN DEALERS JOURNAL, CHICAGO

Board of Trade
Members

CHICAGO

Board of Trade
Members

Special Wire and Salesman Service

LAMSON BROS. CO.**WHEAT, CORN
OATS, RYE**

No. 6 Board of Trade, Chicago, Ill.

CONSIGNMENTS
SOLICITEDWE PLACE
GRAIN TO ARRIVEGood Execution Keeps Customers
Keeping Customers is Our Business**W. G. PRESS & CO.**
GRAIN, PROVISION, STOCKS
327 So. La Salle St., CHICAGOWrite for Daily Market Report,
Mailed Free.44 Years Active Members Chicago
Board of Trade**GERSTENBERG & CO.**COMMISSION MERCHANTS
GRAIN and SEEDS

Barley a Specialty

Personal attention given
Sample Orders

309 S. La Salle St. CHICAGO

Traveling Representatives:

Ray Gerstenberg Jack De Courcy

Branch Office:

FT. DODGE, IOWA A. J. MOORE, Mgr.

E. F. Leland & Company

Successors to

WARE & LELAND

Grain Stocks Bonds

231 So. WELLS STREET

Corner Quincy Street
CHICAGO

CONSIGNMENTS SOLICITED

MEMBERS

New York Stock Exchange
New York Cotton Exchange
New York Produce Exchange
Chicago Board of Trade
Chicago Stock Exchange
Minneapolis Chamber of Commerce
Kansas City Board of Trade
St. Louis Merchants Exchange
Omaha Grain Exchange
Winnipeg Grain Exchange
Milwaukee Chamber of Commerce
Pittsburgh Stock Exchange**JOHN E. BRENNAN & CO.** GRAIN and SEEDS
COMMISSION MERCHANTS CHICAGOPhilip H. Schifflin
Pres.Eugene Schifflin
Vice Pres. & Treas.R. E. Andrews
Secretary**Philip H. Schifflin & Co.**
IncorporatedCOMMISSION MERCHANTS
Grain, Seeds and Provisions515-518 Postal Telegraph Building
CHICAGO, ILL.

Branch Offices:

Fred F. Munson
319-320 Lincoln Bldg.
Champaign, Ill.R. T. O'Neill
210 Heggie Bldg.
Joliet, Ill.Traveling Representative
G. N. McReynolds, Alton, Ill.**H. M. PAYNTER**
with Rogers Grain Co.GRAIN COMMISSION
Correspondence Solicited

441 Postal Telegraph Building, CHICAGO

Upon readers patronage of its
advertisers depends the success of
the *Grain Dealers Journal* work.
Will you mention it?**BARTLETT FRAZIER Co.** GRAIN MERCHANTS
Western Union Bldg.
CHICAGO

SHIP US THAT NEXT CAR

Harris, Winthrop & Co.
15 Wall Street, New York
The Rookery, Chicago
GRAIN COMMISSION
Members of Principal Exchanges**W. P. ANDERSON & CO.**
INC.**GRAIN**CONSIGNMENTS AND HEDGING
ORDERS SOLICITED
327 S. La Salle St., CHICAGORead the Advertising pages.
They contain many stories of interest.
The *Grain Dealers Journal* pre-
sents only reputable concerns.**E. W. BAILEY & CO.**
Commission MerchantsReceivers and Shippers of
GRAIN, SEEDS, PROVISIONS
72 Board of Trade, CHICAGO**Clark's Double Indexed Car Register**

for car lot dealers

Is a record book designed to afford ready reference to the record of any car number. Facing pages 11x15½" of heavy ledger paper are each ruled into five columns, those on the left-hand page being numbered 0, 1, 2, 3 and 4; while columns on the right-hand page are numbered 5, 6, 7, 8 and 9. Each column is ruled into three distinct divisions with the following sub-headings: "Initial," "Car No." and "Record."

The marginal index figure represents the right hand or unit figure of the number entered; and the column heading the second or tens figure. So that the required number can always be instantly found if properly entered.

Form 40 contains 42 pages, bound in heavy canvas covers with spaces for registering 13,200 cars. Price, \$2.00. Weight 1¾ lbs.

FORM 42 contains 72 pages, bound in art canvas covers with spaces for registering 21,600 cars. Price, \$3.00. Weight 2¾ lbs.

Grain Dealers Journal, 309 So. La Salle St., Chicago, Ill.

Board of Trade
Members

CHICAGO

Board of Trade
Members

THE UPDIKE GRAIN COMPANY

"The Reliable Consignment House"

CHICAGO

OMAHA

KANSAS CITY

MILWAUKEE

SIoux CITY

CARHART CODE HARWOOD CO.

Grain Commission

Board of Trade

CHICAGO

ARMOUR GRAIN COMPANY
GRAIN MERCHANTS

Manufacturers of

ARMOUR'S STOCK AND DAIRY FEEDS AND CEREAL PRODUCTS
208 So. La Salle Street, Chicago, Ill.

HITCH & CORDER

COMMISSION MERCHANTS

Members Chicago Board of Trade

Webster Bldg., 327 So. La Salle St., CHICAGO, ILL.
Tel. Webash 6584

POPE & ECKHARDT CO.

GRAIN and SEEDS

111 W. Jackson St. CHICAGO

J. C. SHAFFER GRAIN CO.

Grain Merchants

111 W. Jackson Boulevard
Chicago, Ill.

WE WANT YOUR BUSINESS
NOT LATER—BUT TODAY
Especially Consignments
GRAINS ALL WAYS

McKENNA & DICKEY
60 Board of Trade, Chicago

FOR BEST RESULTS SHIP YOUR GRAIN AND SEEDS TO

J. H. DOLE & COMPANY

RECEIVERS AND COMMISSION MERCHANTS

327 South La Salle Street

CHICAGO, ILL.

J. Rosenbaum Grain Co.

Grain Commission Merchants

CHICAGO

RUMSEY & COMPANY

COMMISSION MERCHANTS

Board of Trade

Chicago, Illinois

**Have You
Seed For Sale?**

**Do You Wish
To Buy Seed?**

See our "Seeds For Sale—
Wanted" Department
This Number

For Best Results
CONSIGN

ReQua Brothers

Board of Trade, CHICAGO

W. M. TIMBERLAKE, Mgr. Cash Grain

Chicago Grain & Salvage Co.
DEALERS IN

SALVAGE GRAIN

GRAIN, FEEDS, Etc.

WRITE OR WIRE

930 Postal Telegraph Bldg.

CHICAGO

The paper the Grain Dealer
supports, because it supports
the Grain Dealer—

GRAIN DEALERS JOURNAL

Henry H. Freeman & Co.

COMMISSION MERCHANTS

GRAIN HAY STRAW

66 BOARD OF TRADE, CHICAGO

THE CORN EXCHANGE NATIONAL BANK

Of Chicago

Capital and Surplus Fifteen Million Dollars

Officers

ERNEST A. HAMILL, Chairman of the Board
EDMUND D. HULBERT, President
CHARLES L. HUTCHINSON, Vice-President
J. EDWARD MAASS, Vice-President
OWEN T. REEVES, Jr., Vice-President
NORMAN J. FORD, Vice-President

JAMES G. WAKEFIELD, Vice-President
EDWARD F. SCHOENECK, Cashier
LEWIS E. GARY, Ass't Cashier
JAMES A. WALKER, Ass't Cashier
CHARLES NOVAK, Ass't Cashier
HUGH J. SINCLAIR, Ass't Cashier

Director

WATSON F. BLAIR
CHAUNCEY B. BORLAND
EDWARD B. BUTLER
BENJAMIN B. CARPENTER
CLYDE M. CARR
ERNEST A. HAMILL
CHARLES H. HULBURD
JOHN J. MITCHELL

CHARLES L. HUTCHINSON
MARTIN A. RYERSON
J. HARRY SELZ
EDWARD A. SHEDD
ROBERT J. THORNE
CHARLES H. WACKER
HENRY P. CROWELL
EDMUND D. HULBERT

Foreign Exchange — Letters of Credit — Cable Transfers

ACCOUNTS OF GRAIN MERCHANTS INVITED

Board of Trade
Members**DETROIT**Board of Trade
Members

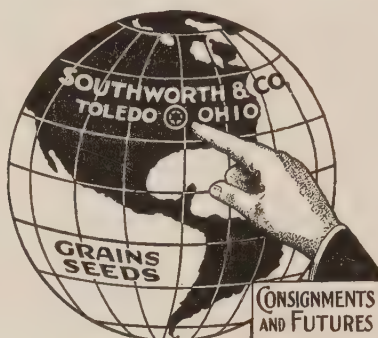
CONSIGN
WHEAT - CORN - OATS
 —TO—
DUMONT, ROBERTS & CO.
 626-8 Murphy Building, Detroit, Mich.
 "The top 'e the market to you"

SWIFT GRAIN CO.
 Murphy Building
 Detroit, Michigan
Consign or Ask Us for Bid

CONSIGN TO
J. S. LAPHAM & CO.
 FRED W. BLINN Murphy Bldg.
 Mgr. DETROIT, MICH.

Produce Exchange
Members**TOLEDO**Produce Exchange
Members**If You Have**

the interest of your market at heart, support it earnestly, help to advertise it thoroughly, and above all do not convey the impression that it is an indifferent market by giving it 30 cents worth of advertising.



The paper the Grain Dealer supports, because it supports the Grain Dealer—
GRAIN DEALERS JOURNAL

JOHN WICKENHISER & CO.
 Wholesale Grain Dealers
 TOLEDO, OHIO
 We make track bids and quote delivered prices, Solicit Consignments of Grain and Clover Seed, Members Toledo Produce Exchange and Chicago Board of Trade

There is great satisfaction in trusting your CONSIGNMENTS OF GRAIN AND SEED to a firm you KNOW to be RELIABLE.
H. W. DEVORE & CO.
 1887 TOLEDO - OHIO 1921

Clover Seed

International Game, played in Toledo, Ohio. Providence does dealing. When "Seedy" favor
C. A. KING & CO.
Like Billy Sunday they deal in cash and futures

RECEIVERS, SHIPPERS AND BROKERS

Solicit inquiries for Natural and Kiln Dried Corn, Country White Oats
E. A. GRUBBS GRAIN CO.
 Greenville, Ohio

Des Moines Elevator & Grain Co.
 Terminal Elevator Capacity 700,000 Bu.
 We specialize in Oats and High Grade Corn, Oats sacked for Southern Trade.
 HUBBELL BLDG. DES MOINES, IOWA

TAYLOR & PATTON CO.
 Terminal elevator capacity 250,000 bushels. Buyers and shippers of Corn and Oats.
 DES MOINES - IOWA

MATTHEW D. BENZAQUIN
GRAIN AND FEED
 Brokerage and Commission
 DOMESTIC and EXPORT
 505 Chamber of Commerce Boston, Mass.

Cedar Rapids Grain Co.
 RECEIVERS and SHIPPERS
 CEDAR RAPIDS, IOWA

Hayward-Rich Grain Co.
 GRAIN COMMISSION
 511 Board of Trade Building
 INDIANAPOLIS, IND.

E. I. BAILEY
 CLEVELAND, OHIO
 Receiver and Shipper of
Corn, Oats, Mill Feed
 Ask for Prices

M. B. JONES & CO.
 Buyers—Quote Us
 Produce Exchange, New York, N. Y.

KNIGHT & COMPANY
 Grain Brokers and
 Commission Merchants
 CONSIGNMENTS SOLICITED
 New York Chicago Baltimore

Want an Elevator?

Then consult the "Elevators for Sale" columns in this issue of the Grain Dealers Journal.

SALINA PRODUCE CO.
 Receivers and Shippers
All Kinds of Grain
 SALINA, KANSAS

RED MILLING WHEAT
MILL FEED
Daves & Daves Grain Co.
 WINFIELD, KANSAS

IN considering the purchase of a Cleaner you are sure to ask yourself Will It Pay?

You can be assured that it **will pay** if you buy a "Standard" which is equipped with our Patented Blast Regulator, Automatic Traveling Brushes and Force Feed Hopper all of which result in making them the efficient machines they are recognized to be by any number of satisfied users.

Our line comprises machines suitable for cleaning any kind of grain or seed.

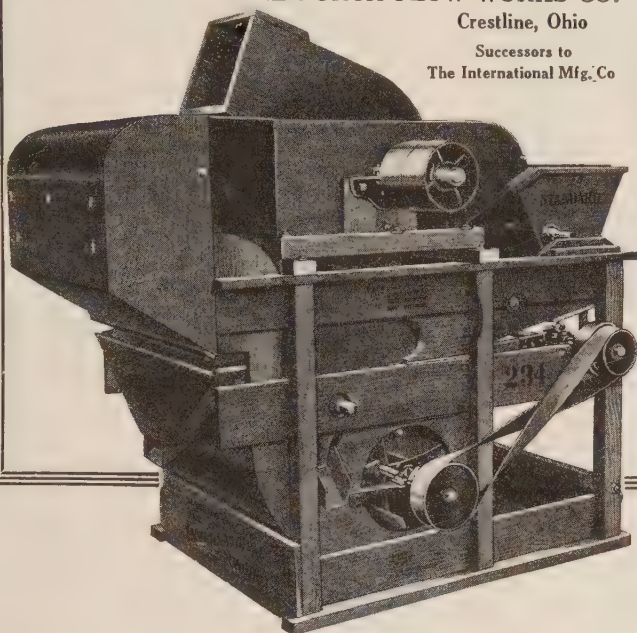
Write for our latest catalogue of twenty-four different styles with prices.

THE BURCH PLOW WORKS CO.

Crestline, Ohio

Successors to

The International Mfg. Co



Radiophone

Market Reports

and

CONCERTS

by the

A-R-A Receiving Sets

This unit is especially designed for the efficient reception of Radio Telephone Market Reports and Concerts from even the most distant Broadcasting Stations. The ease with which the set can be installed, and the extreme simplicity of operation make it ideal for use by Grain Dealers. No previous knowledge of radio necessary to secure results.

Immediate Delivery

Send for Catalog.

American Radio Accessories Co.

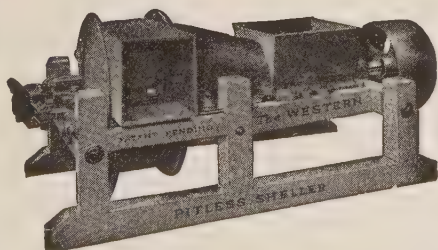
443 So. Dearborn St.

Chicago, Ill.

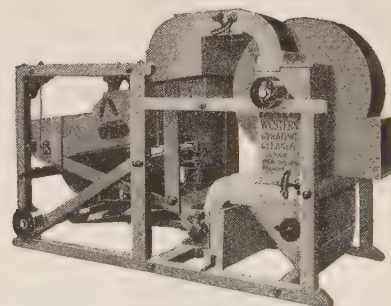
If You Want

GRAIN ELEVATOR MACHINERY

Shellers and Cleaners



**We
Have
The**



WESTERN LINE

Let us figure on your requirements

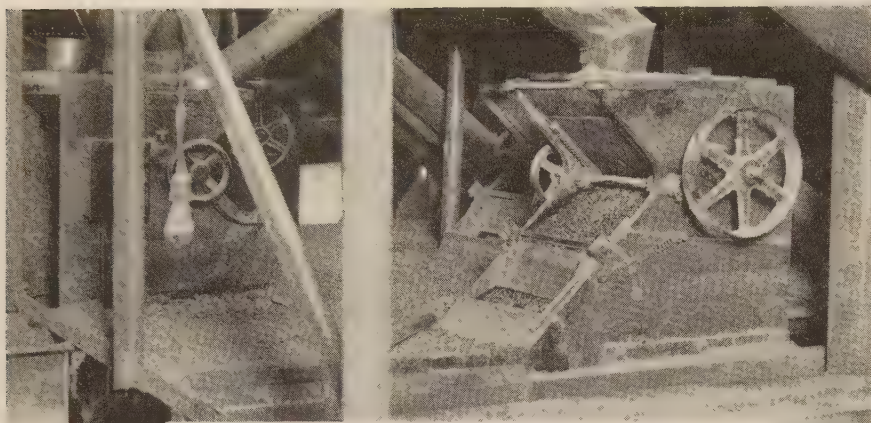
Write for Catalog No. 27

Union Iron Works

-

Decatur, Illinois

Manufacturers Complete Line of Elevator Equipments



A new kind of fire and life insurance—

HERE is a fire and life insurance policy for elevators and mills and their employees—but it differs from ordinary insurance in ways that make it better. It is not based on the value of the property insured and the first and only payment covers insurance for a life time. It covers the loss by insuring elimination of the causes of the loss—something ordinary insurance does not do.

This is the insurance given by every Dings Magnetic Separator installation in elevators and mills. They remove every trace of the tramp iron that is sure to cause sparks when it enters grinders and mills—a frequent cause of disastrous dust explosions and destructive fires. The magnetic elimination of tramp iron also prevents break-

age of rolls, excessive wearing of grinding surfaces, damage of bolting cloth, and other expensive accidents.

Ask for special bulletins explaining why a Dings Separator is the cheapest insurance that you can buy—and why it is better than any insurance you can buy at any price.

DINGS MAGNETIC SEPARATOR CO.

642 Smith St., MILWAUKEE, WIS.

NEW YORK	DENVER	RICHM ND
52 Vanderbilt Ave.	1718 California St.	1905 E. Main St.
CHICAGO	DETROIT	
616 So. Michigan Ave.	805 Hammond Bldg.	

DINGS

Magnetic Separator Co. • Specialists in ~

Magnetic Separation

Fourtype "G" 24 inch Dings Magnetic Separators. Each separator handles 7 tons of grain per hour. These separators have given highly satisfactory service for five years, says the president of the mill.

Cover's Dust Protector

Rubber Protector, \$2.00

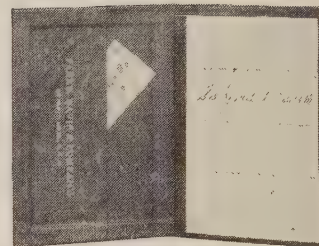
Sent postpaid on receipt price; or on trial to responsible parties. Has automatic valve and fine sponge

H. S. COVER
Box 404 South Bend, Ind.



For Accurate Moisture Tests use our Grain Dealers' Air Tight Cans for forwarding your grain samples.

ST. LOUIS PAPER CAN & TUBE CO.
ST. LOUIS, MO.



ADVERTISE NOW

among your trade by using our leather specialties, which create Friendships and Good Will.

Appropriate for Conventions, Banquets, Souvenirs, etc.

Pocket-books, Bill-folds, Memo Cases, Key Cases, etc.

Let us quote prices by mail.

The Beach Leather Co.

Coshocton, Ohio

— 28 Years Experience —

10,000 SHIPPERS
Are now using

TYDEN CAR SEALS

Bearing shipper's name and consecutive numbers.

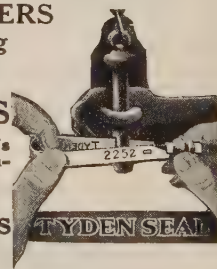
Prevent

CLAIM LOSSES

Write for samples and prices

INTERNATIONAL SEAL & LOCK CO.

Chas. J. Webb, Vice-President
617 Railway Exchange Bldg., Chicago, Ill.



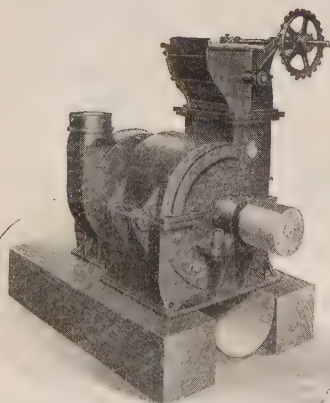
Gruendler Feed Mixer and Grinder

America's Famous Feed Grinder

For General Utility—use the Gruendler Grinder. It will crush, grind and mix your feeds just as you want them.

Gruendler Feed Grinders have been serving the field for 50 years. All parts are easily adjustable and accessible. Made of best steel throughout. All machines are guaranteed for 2 years against defects in material or workmanship. Unbreakable.

Gruendler Patent Crusher & Pulverizer Co.
993 N. Main St. St. Louis, Mo.



KIMBALL ELEVATORS & MANLIFTS

Passenger or Freight
For Grain Elevators & Mills
Electric or Hand Power

Complete Line

KIMBALL BROS. CO.

1129 Ninth Street
COUNCIL BLUFFS, IOWA

Branches: 202 Scott Thompson Bldg., Oklahoma City,
610 Delaware St., Kansas City, Mo.



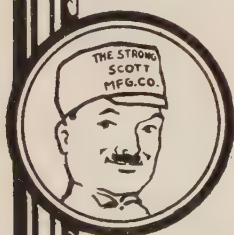


The Modern Elevator

THE demands of present day grain marketing cannot be met by the elevator with out-of-date equipment.

Numerous improvements made on every kind of elevator equipment within the last decade are leaving many of the older houses now with unsatisfactory equipment.

Look into the conditions in your elevator. Our engineers are open for consultation and it will pay you to find out the cost of making your elevator the most efficient in your community.



The STRONG-SCOTT MFG. CO.
"Everything for every Mill and Elevator"

MINNEAPOLIS, MINN.

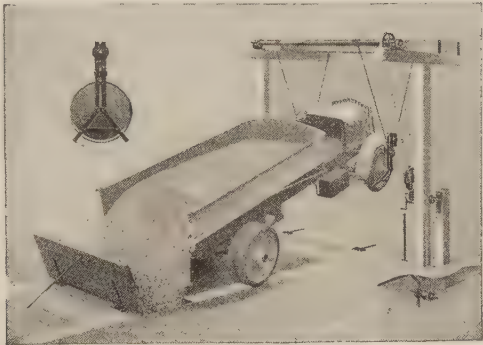
GREAT FALLS, MONT.

St. Marys Oil Engine Co.

ST. CHARLES, MISSOURI

Manufacturers of Deisel Oil Engines for Mills and Elevators

TRUCK AND WAGON DUMP



Simple
Durable
Practical
Safe
Inexpensive
Substantial

Easily Installed, Operated by
Hand or Power. For further
information address

L. J. McMILLIN, 525 BOARD OF TRADE, INDIANAPOLIS, INDIANA
Designer and Builder of Grain Elevators

HALL NON-CHOKABLE ELEVATOR LEG

Adds 100% Efficiency to the cup belt. It revolutionizes the system of elevating grain. It is automatic in action.



The grain is fed to it automatically and unerringly without mechanism and is as reliable as gravitation. In consequence of these facts it is 100% MORE DURABLE than other legs, and is GUARANTEED IN YOUR ELEVATOR.

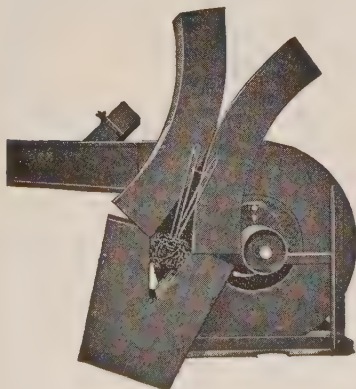
THE HALL SIGNALING GRAIN DISTRIBUTOR

Our idea is that the Distributor should direct all the grain to the exact spot intended, without mixing, with the least trouble or care, not only now and then, but ALWAYS.

That is the service that the Hall Distributor performs continuously.

Hall Distributor Company, 222 Railway Exchange Bldg., Omaha, Nebr.

Small Elevator Plans Free



Suggestive plans for small elevators from 2,000 to 6,000 bushels capacity will be mailed you upon request. These houses are low in height and cost. Grain loaded without scooping and plans include automatic scale, cleaner and Boss Air Blast Car Loader. Just the thing for many small stations.

We can also mail plans for small plants for receiving, storing and shipping corn in the EAR without scooping in the car.

You can make your old house modern by installing a Boss Air Blast Car Loader. Every car can then be loaded without scooping. Our Portable outfits meet many needs. Write today outlining your problems. We will send you complete information free.

Maroa Manufacturing Company, Dept. G, Maroa, Ill., U. S. A.

WHEN EVERY AGENCY FOR
SAFETY OPERATION SAYS
"DO AWAY WITH DUST"
IT'S TIME THAT **YOU** LISTENED TO REASON—



The hundreds of thousands of dollars lost through dust explosions would equip every elevator in the country.

Don't be the next on the "Blow up list," but for the protection of the money invested in your business investigate our product.

The New "1905" Cyclone Dust Collector

THE FACTS ARE MIGHTY
INTERESTING

The Knickerbocker Co.
JACKSON, MICH.

OTTO ENGINES

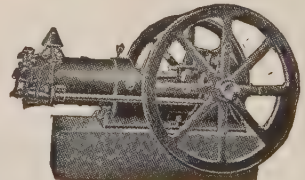
Have proved their superior qualities through years of reliable and economical service. Designed with a view to easy and inexpensive repair or replacement of parts. Cylinder, water jacket and head cast separate, easily and quickly replaced in case of damage by frost, which leaves the inner cylinder intact.

Economy kerosene carburetors for "Otto" engines manufactured and furnished from stock.

If you are interested in stationary engines—gas, gasoline, or kerosene—you need the Otto catalogue. Drop us a postal for your copy.

Models up to 50 H. P. in stock.

Otto Engine Manufacturing Co.
3219 Walnut Street, Philadelphia, Pa.
15-17 S. Clinton St., Chicago, Ill.



**Mention
This
Journal** When you write to any of our Advertisers; you'll get a prompt reply.

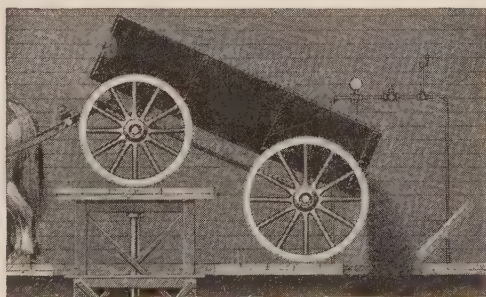
Kewanee

All Steel Truck Lift

Dumps BOTH Wagons and Trucks

A Kewanee *All Steel* Truck Lift dumps *both* wagons and trucks. It can be installed within any dump type scale. And once installed *it lasts as long as your elevator.*

The Kewanee is *not a* makeshift. It is a *permanent* improvement to any elevator. In building it we have only one idea: To make the very best truck lift possible. And yet, the Kewanee installed costs no more than any other reliable device.



Here is shown a Kewanee Lift, raising wagon to desired height, without jar or jolt and with absolute safety to horses

The Kewanee *All Steel* Truck Lift can be used for either wagons or trucks. If wagon logs are in good condition and you wish to continue using them, the Kewanee Lift is installed just ahead of them. All grain is then dumped through the same pit door.

If you have only one hopper and wish to use a Kewanee Lift for dumping both wagons and trucks, eliminating use of wagon logs, another pit door is placed in driveway to receive grain from the wagons.

This plan eliminates your wagon logs and gives you a solid driveway for your heavy trucks to drive over, eliminating danger of dropping a truck into your hopper.

The Kewanee *All Steel* Truck Lift is the unquestioned leader. It is the lift by which all others are judged. Before you buy any truck dumping device you owe it to yourself to at least investigate the Kewanee. Ofcourse it is *guaranteed* in every respect.

Kewanee Implement Co.

Kewanee, Illinois

Southwestern Distributors:

Fairbanks, Morse & Co., Kansas City, Mo.

Kewanee Implement Co.

521 Commercial St., Kewanee, Ill.

Tell me about the Kewanee All Steel Truck Lift, which never gets out of order. I understand this will not obligate me in any way.

Name

Address

"Bulls" "Bears" "Lambs"
"RADIOPHONE"

**Brings the Pit to You
 by Wireless**

Market News and Quotations direct to you from the Chicago Board of Trade at intervals of every thirty minutes from 9:30 A. M. to 1:15 P. M.

Grand Opera, Music, Latest News, Speeches, Sermons, Stories, etc., are broadcasted from the principal cities during the afternoons and evenings.

Write or wire for full particulars

**LET US KNOW EXACTLY HOW WE
 CAN SERVE YOU**

National Radio Sales & Service Co.

Bedford Bldg. 203 So. Dearborn St.
 Telephone CHICAGO, ILLS. Harrison 7173

Radio Equipment of All Kinds

*Who is Going to Make
 Money in 1922*

?

"The man who can buy at bottom prices and cut corners on costs."

Let that paragraph "soak in" until you can repeat it backward as well as forward.

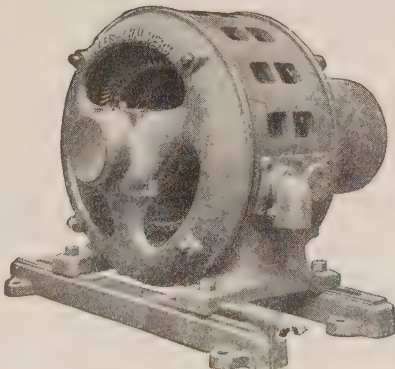
You can't cut your corners on costs with old, worn-out or obsolete machinery. Neither can it be done by antiquated methods. Stop the leaks.

Business is on the increase right now. Are you in shape to cut your costs? Have you gone over each machine? Does any machine need repairs? Have you any obsolete or worn-out machines that you are depending on? *Remember you must cut your corners on costs—or else—*

THE ENGINEERING DEPARTMENT of THE BAUER BROS. CO., 506 Bauer Building, Springfield, Ohio, is at your disposal—without cost or obligation—for any assistance this Department can give. Better write them today.

The Bauer
COSTS LESS PER HOUR

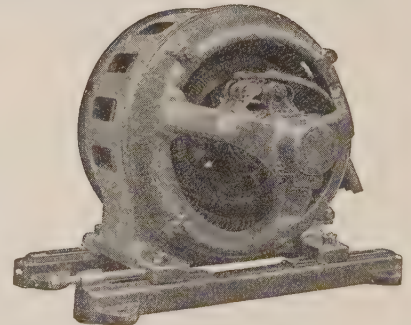
Electrical Equipment
 for
Grain Elevators and Flour Mills



SQUIRREL CAGE—BELTED

**Polyphase
 Induction Motors**

Type "AN" Squirrel Cage
 Type "ANY" Slip Ring



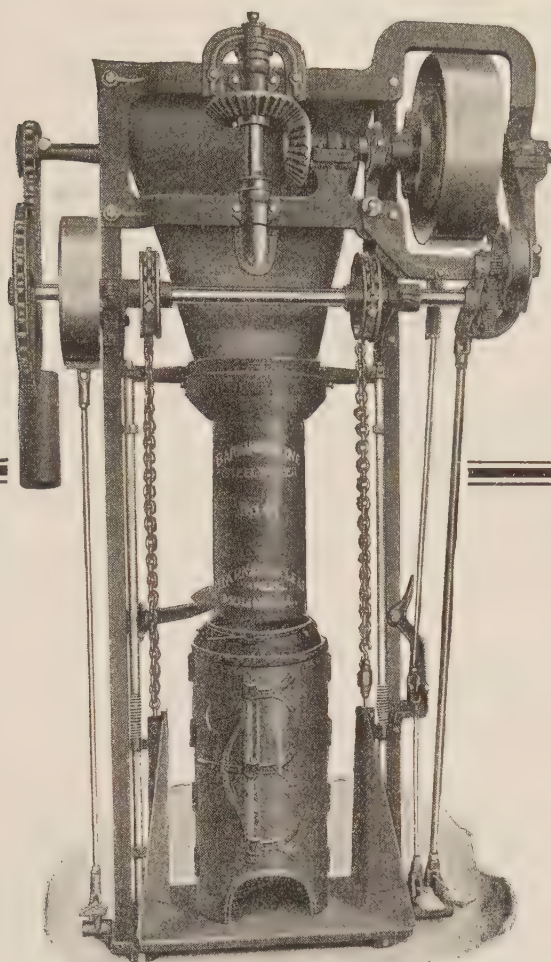
SLIP RING—BELTED

**ALLIS-CHALMERS
 PRODUCTS**
 Electrical Machinery
 Steam Turbines
 Steam Engines
 Gas and Oil Engines
 Hydraulic Turbines
 Crushing and Cement
 Machinery
 Mining Machinery

ALLIS-CHALMERS
 MANUFACTURING COMPANY

MILWAUKEE, WISCONSIN. U.S.A.

**ALLIS-CHALMERS
 PRODUCTS**
 Flour and Saw Mill Machinery
 Power Transmission Machinery
 Pumping Engines—Centrifugal Pumps
 Steam and Electric Hoists
 Air Compressors—Air Brakes
 Agricultural Machinery
 Condensers



BARNARD-MOLINE STEEL PACKER

For Packing Feeds of All Kinds, Barley or Oat Hulls, Grits, Etc.

Has heavy auger shaft and double expansion driving clutch.

Heavy lifting chains run over large sheaves so arranged that the pull of the carriage is exactly in line with the work, thus eliminating friction.

Open type carriage permits operators to work from front or rear or both sides of machine.

Carriage guides are provided with spiral cushion springs to neutralize the terminal shock of the ascending carriage.

Complete foot control, leaving hands free for handling sacks. Emergency hand-lever for disengaging clutch.



BARNARD & LEAS MFG. CO.

**MILL BUILDERS AND
MILL FURNISHERS**

ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.





"Eureka" MUSTARD SEED SEPARATOR

Conceded to be the most ingenious thing ever invented for removing mustard from screenings, grain and seeds.

**Automatic
No Moving Parts**

**Operates on the
Gravity Principle**

**Self-Acting
Requires No Power**

Sold at such a low price that it actually pays for itself in a few weeks.

READ THIS:

Chicago, Ill.
Gentlemen—I have O. K'd the bill for Mustard Seed Cleaner. It is surely a dandy little machine, and does the work to perfection. Wishing you success, I am yours truly,

STAR & CRESCENT MILLING CO.

W. W. SOPHER, Supt.

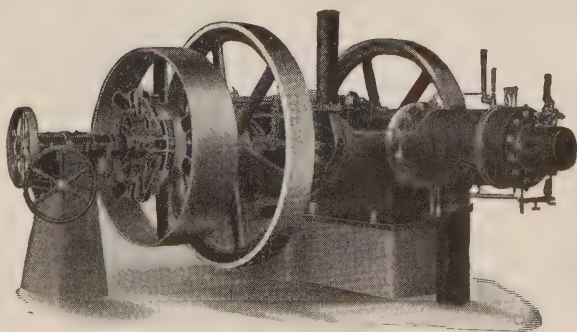
We'll test your samples and show you something interesting

S. HOWES COMPANY, Inc. Silver Creek, N. Y.

European Branch: 64 Mark Lane, London, England



MUNCIE *Heavy Duty* Oil Engine



USE CRUDE OIL AND FUEL OIL

Reduce Your Fuel Bill 80 Percent
Sizes 10 to 250 H. P.

**MUNCIE OIL ENGINE CO.
MUNCIE, IND., U.S.A.**

Branches: Atlanta, Ga. Dallas, Tex. Export Dept.
36-40 W. 60th St., N. Y. City



The Genuine
FAIRBANKS SCALE

Volume production makes these low prices possible. It's the time tried and proven Fairbanks Scale. You can tell the genuine by the world trade-mark. You've always wanted one. It will give you the accurate weight of everything you buy or sell or use. Steel to steel bearings—Arrow Tip Beam—Large Platform—Wide Wheels.

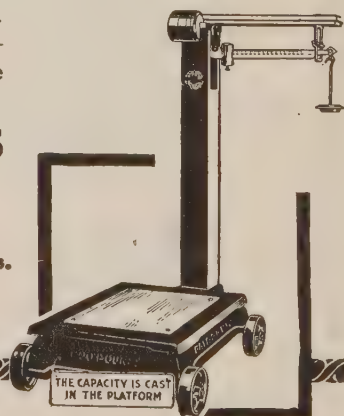
FAIRBANKS SCALES

CHICAGO
900 S. Wabash Avenue
NEW YORK
Broome and LaFayette Sts.
and forty other principal cities
in the U.S.

500 Lb. Size

\$16¹⁵

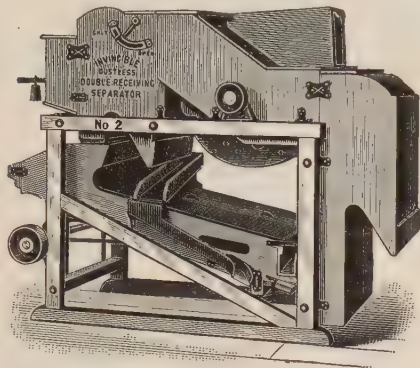
1000 Lb. Size \$18⁹⁰
Both F.O.B. Factory



CONTENTMENT—Plus

That is an experience users of Invincible Separators enjoy.

It is human nature to hate to admit having made a mistake. Ask the operator of any number of makes of separators on the market. He will say his machine is all right—but—



An INVINCIBLE user never has to Qualify his answer with excuses for mechanical shortcomings. No, never.

Take special note of his praise of its efficiency.

He is Contented—PLUS. Join him.

THE INVINCIBLE GRAIN CLEANER CO.
SILVER CREEK, N. Y.

Representatives:

F. J. Murphy, 211 Postal Bldg., Kansas City, Mo.

H. C. Purvine, 111 East 5th St., Bristol, Tenn.

Bert Eesley, P. O. Box 363, Fremont, Ohio

C. L. Hogle, 30 S. Arlington St., Indianapolis, Ind.

C. Wilkinson, 6027 Chestnut St., Philadelphia, Pa.

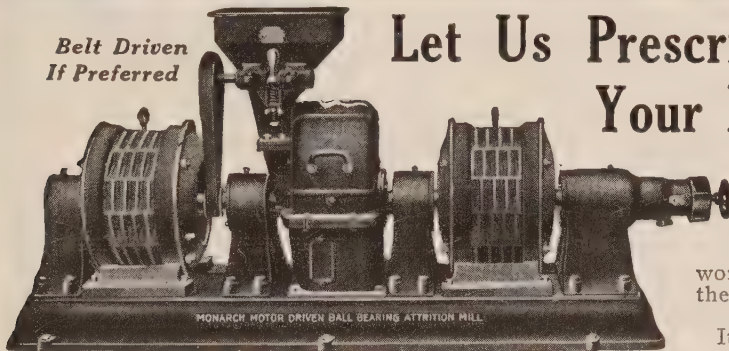
F. H. Morley, Webster Bldg., Chicago, Ill.

Strong-Scott Mfg. Company, Minneapolis, Minn.

Berger & Carter, 17th & Mississippi Sts., San Francisco, Calif.

Grain Cleaners Limited, 75 Mark Lane, London, Eng.

Belt Driven
If Preferred



Let Us Prescribe the Right Grinder for Your Particular Problem

The size and type of the attrition mill you buy should be governed by the character of material to be ground and the results desired. All types of grinders are not equally satisfactory for the same class of work. Consequently, it is of vital importance to first know the type of machine needed.

It is not uncommon for prospective users of attrition mills to come to us with the intention of investing in a machine which they **imagine** is suitable for their purpose. But in a fair percentage of such instances consultation with our feed mill specialists causes a change of mind—with the result that the buyers not only invest in mills exactly adapted to their needs, but, in many cases, actually realize a substantial saving of money.

If you have a feed grinding problem you want diagnosed and prescribed for, consult a Monarch Feed Mill Engineer.

MONARCH BALL BEARING ATTRITION MILL

SPROUT, WALDRON & COMPANY, 1202 Sherman St., MUNCY, PENNA.
The Monarch Mill Builders

KANSAS CITY OFFICE:
203 New England Building

CHICAGO OFFICE:
No. 9 South Clinton Street

Grain Scale Book

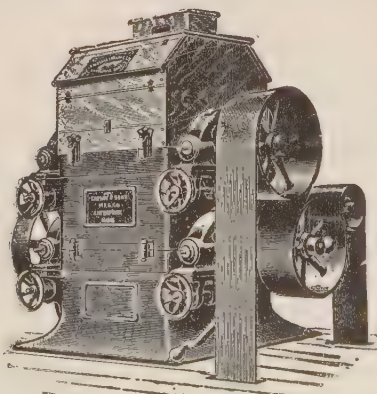
Form 23 is an Indexed Journal, keeps a record of 10,000 wagon loads. Each man's loads are entered on his page. It keeps a record of scale weights. From it both debits and credits are posted to ledger, crediting the customer with the amount received and charging it to the grain's account.

The book is ruled with column headings as follows: Date; L. F.; L. P.; Kind of Grain; Remarks; Gross; Tare; Net; Bushels; Pounds; Price; Amount.

The book contains 240 pages, size 10½x15½ inches, of Atlas linen ledger paper. A 28-page index in front. Extra heavy cloth covers with leather back. Price, \$4.50

GRAIN DEALERS JOURNAL

315 So. La Salle Street CHICAGO, ILL.



More Profits

The elevator owner who installs a feed mill in his elevator puts himself in line for more profits. No other sideline is as profitable. Your farmer patrons must have feed for stock. Are you going to let them go to your competitor? Drop us a line asking for further particulars regarding a feed mill for your elevator.

J. B. Ehrsam & Sons Mfg. Co.
Enterprise, Kansas

Dust Collectors



alone do not prevent explosions in Elevators, but

DAY

Dust Collecting Systems do when properly installed.

The Day Company

1006 Lyndale Avenue N.

Minneapolis, Minn.

CALDWELL GEARS



Cast iron machine mold-gears, also gears with machine cut teeth, Spurs, Bevels, Miters, Worm Drives and Mortise Wheels.

PULLEYS

We manufacture our own cast iron pulleys—heavy construction, special grade material, light running and well balanced. We manufacture a complete line of screw conveyors, belt conveyors, bucket elevators, steel buckets, sprockets, chain, bearings, etc.



Send for our Catalog No. 45

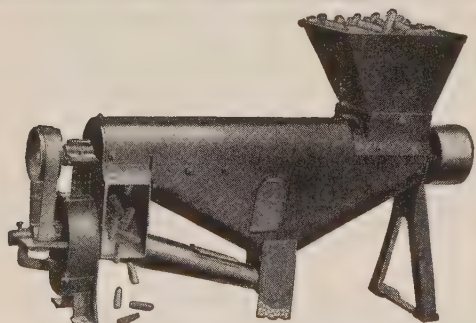
H. W. CALDWELL & SON CO.

LINK-BELT COMPANY, OWNER

Chicago, Ill.—17th St. and Western Avenue

New York—299 Broadway

Dallas, Tex.—709 Main St.



Style A Triumph Corn Sheller

A GOOD SHELLE OF MODERATE CAPACITY

If you can use a Sheller that will properly shell 75 bushels of corn an hour; and if you want a good simple machine, you'll get just the sheller you ought to have in a Triumph.

Thousands of Triumph Shellers are at work in moderate sized mills and elevators both in this country and abroad, and every one of them is shelling corn properly and producing its share of profits.

We'll be glad to send you a copy of our new corn sheller circular. Just send us a postal or a letter asking for it.

THE C. O. BARTLETT & SNOW CO.

Main Office and Works: Cleveland, Ohio

WHAT DO YOU NEED?

to modernize your plant so it will minimize your labor and increase your profits? Is it here?

Account Books
Attrition Mill
Bag Closing Machine
Bags and Burlap

Bearings { Ball
Plain
Roller

Belt
Boots
Buckets
Car Liners
Car Loader
Car Mover
Car Puller
Car Seals
Cleaner
Clover Huller
Coal Conveyor
Conveying Machinery
Distributor
Dockage Tester
Dump { Auto Truck
Wagon
Dust Collector
Dust Protector
Elevator Brooms
Elevator Leg
Elevator Paint
Feed Mill
Fire Barrels
Fire Extinguishers
Grain Driers
Grain Tables

Herringbone Reduction Gears
Lightning Rods
Manlift
Moisture Testers
Mustard Seed Separator
Oat Bleachers and Purifiers
Oat Clipper
Painting or Repairing
Pneumatic Conveying Equipm't
Portable Elevator

Power { Kerosene Engine
Gas Engine
Motors

Power Shovel
Railroad Claim Books
Renewable Fuse
Rolls for Cracking Corn
Sample Envelopes
Scales
Scale Tickets
Scarifying Machine
Self Contained Flour Mill
Separator
Sheller
Sieves
Siding-Roofing { Asbestos
Steel
Silent Chain Drive
Spouting
Storage Tanks
Testing Apparatus
Transmission Machinery
Transmission Rope

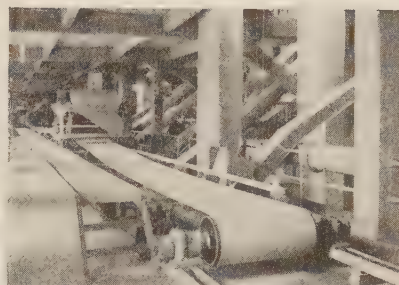
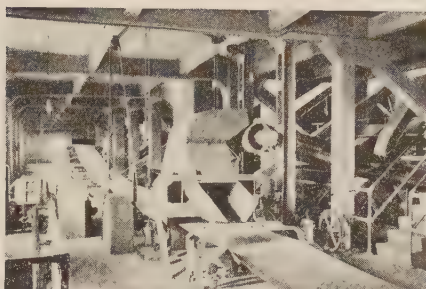
or anything used in a grain elevator.

Draw a line through the supplies wanted, and write us regarding your contemplated improvements or changes. We will place you in communication with reputable firms specializing in what you need, to the end that you will receive information regarding the latest and best.

INFORMATION BURO

Grain Dealers Journal, 309 So. La Salle St., Chicago

WEBSTER Grain Elevator Machinery



The biggest users in the world of Elevating, Conveying and Transmission Machinery for grain handling have repeatedly installed Webster Machinery.

In smaller plants, where effective equipment is fully as important, Webster Machinery holds the same prominent place.

When planning new structures, repairs or extensions, call upon our experienced engineers, who are ready to make recommendations based upon your requirements.

The WEBSTER MFG. COMPANY

Chicago, Ill.

Tiffin, O.

Michigan City, Ind.

Sales Offices in Principal Cities

FABRICATED STEEL PRODUCTS

We specialize on FABRICATED STEEL PRODUCTS and are equipped to furnish steel plate products such as tanks, hoppers, stacks, conveyors, chutes, pipe, elevator legs, coal mine equipment, cement and concrete sheet steel forms promptly. Let us estimate on your requirements.

Corrugated Sheets Erected

We are specialists in furnishing and erecting ROOFING & SIDING of galvanized, painted or zinc sheets, corrugated or formed. Our mechanics are experts—they know how. Let us figure on your erection, no matter where located.

Our complete stock of galvanized, black, blue annealed sheet steel and zinc enable us to give immediate attention to all orders and inquiries received.

The Sykes Company

930 West 19th Place

Chicago, Ill.

Wagon Loads Received

A book for the use of country grain buyers in keeping a record of grain received from farmers. Some dealers record oats receipts in front and corn receipts in the back of book; others use a separate book for each kind of grain.

Its column headings are: Month, Day, Name, Kind, Gross and Tare, Net Pounds, Bushels, Pounds, Price, Dollars, Cents and Remarks.

The book is 9½x12 inches, 160 pages, 20 lines to each page, giving room for recording 3,200 loads, printed on Linen Ledger Paper and is well bound in strong board covers with leather back and corners. Order Form 380. Price, \$2.75

GRAIN DEALERS JOURNAL

309 South La Salle St., CHICAGO, ILL.

Record of Cars Shipped

This double page form is designed especially for country shippers in keeping a complete record of each car of grain shipped from any station or to any firm, may be kept by themselves under the following column headings: Date Sold, Date Shipped, Car No., Initials, To Whom Sold, Destination, Grain, Grade Sold, Their Inspection, Discount, Amount Freight, Our Weight, Bushels, Destination Bushels, Over, Short, Price, Amount, Freight, Other Charges, Remarks.

The book is 9½x12 inches, and contains 160 pages of ledger paper 29 lines to each page, and has spaces for recording the foregoing facts regarding 2320 carloads. It is well bound in strong boards with leather back and corners.

Order Form 385. Price, \$3.00.

GRAIN DEALERS JOURNAL

309 S. La Salle Street, CHICAGO, ILL.

GRAIN ELEVATOR BUILDERS

A Reduced Cost of Handling Grain

makes the Best Elevator obtainable a profitable investment.

Ask for Suggestions on Saving Material, Power and Labor, before completing plans for your new elevator.

30 Years Practical Experience

YOUNGLOVE CONSTRUCTION CO.
Sioux City, Iowa

The Eikenberry Construction Co.

329 Unity Bldg., BLOOMINGTON, ILL.

Designers and Builders

GRAIN ELEVATORS MILLS - COAL POCKETS

in

Concrete, Tile or Wood

Years of experience in this line of work. Write and we will call and give you our proposition and estimate

THE SPENCER CONSTRUCTION CO.

Garrett Bldg.
Baltimore, Md.

BUILDERS
OF
Modern Grain Elevators
Grain Storage Tanks
Mill Buildings
Warehouses

BOGGESS CONSTRUCTION CO.
204 Empress Bldg. Phone F. 282 DECATUR, ILL.

Builders of
GRAIN ELEVATORS and COAL POCKETS
of the BETTER CLASS
Special study given to each plant—Each plant fills the individual needs

The W. H. Wenholz Construction Co.
309 E. 4th Ave., HUTCHINSON, KANSAS

Contractors, Designers and Builders of
Concrete or Wood Elevators
JOBBER IN MILL AND ELEVATOR SUPPLIES

R. M. VAN NESS CONSTRUCTION CO.

Engineers and Builders of

MODERN WOOD and FIREPROOF ELEVATORS

We furnish plans and estimates
Room 3 Grain Exchange

Write us about your requirements
OMAHA, NEB.

FEDERAL ENGINEERING CO.

Designers and Builders—Grain Elevators, Mills and Warehouses
TOPEKA, KANSAS

EFFICIENT ERECTING CO.

We make plans and build up-to-date
GRAIN ELEVATORS AND MILLS

GEO. H. CRAIG
386 120th Place, Blue Island, Ill.

D. F. HOAG & CO.

Designers and Constructors of

GRAIN ELEVATORS

Corn Exchange, Minneapolis

H. P. Roberts L. D. Rosenbauer
**Southwestern Engineering
Company**

Designers and Builders of
Modern Mills and
Elevators

Flour Mill and Elevator Machinery
SPRINGFIELD, MO.

The Eberhardt Construction Co.

Engineers and Contractors
Grain Elevators--Flour Mills--Warehouses
SALINA, KANSAS

THE RYAN CONSTRUCTION CO.

3159 Curtis Ave., Omaha, Nebraska
We build Modern Fireproof Grain Elevators,
Mill Buildings and Storage Bins
SPECIAL ATTENTION GIVEN TO REPAIR WORK
Let Us Know Your Requirements

Your Individual Needs
are respected when your elevator
is designed and built by

W. H. CRAMER CONSTRUCTION CO.
NORTH PLATTE, NEB.
Write for Details of Our System

BIRCHARD
CONSTRUCTION CO.
CONTRACTORS GRAIN ELEVATORS
Mills and Warehouses
Especially Designed for Economy
of Operation and Maintenance
704 Terminal Bldg. LINCOLN, NEB.

A. F. ROBERTS
ERECTS ELEVATORS
FURNISHES CORN MILLS
WAREHOUSES
PLANS
ESTIMATES
MACHINERY
SABETHA KANSAS

FOR

Concrete Elevators
Townsend B. Smith

Designer and Builder

Decatur, Ill.

WANT ADS

in the GRAIN DEALERS JOURNAL make wants known to everyone connected with the grain trade. If you desire to buy or rent, sell or lease an elevator or anything used by grain dealers, try a JOURNAL want ad twice a month and your want will soon be satisfied.

GRAIN ELEVATOR BUILDERS

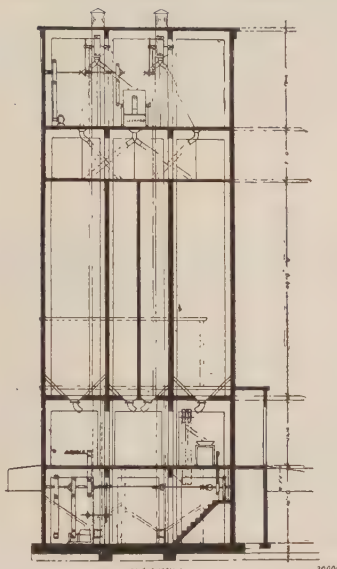
GEO. W. QUICK & SONS
TISKILWA, ILL.
CONTRACTS and BUILDS
MODERN GRAIN ELEVATORS
STORAGE TANKS and COAL POCKETS
Plans and Estimates Submitted
Correspondence Solicited

P. F. McALLISTER CO.
ENGINEERS AND CONTRACTORS
Grain Elevators, Driers, Coal Chutes
Wood or Concrete
BLOOMINGTON, ILL.

W. C. BAILEY
Contracts and Builds
Modern Grain Elevators
We can furnish and install equipment in old or new
elevators, guaranteeing greater capacity with less
power, and positive Non-Chokable working leg.
Let us show you
433 Railway Exchange Bldg., OMAHA, NEB.

"EXCEPTIONAL SERVICE"
Jones - Hettelsater Const. Co.
Designers and Builders of
GRAIN ELEVATORS and FLOUR MILLS
706 Mutual Bldg., Kansas City, Mo.

The Star Engineering Co.
Wichita, Kansas
Specialists in Country
Elevator Construction
Free Catalogs for Southwest Customers

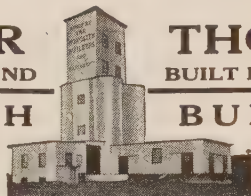


The care and study put into the design and construction of each Reliance Elevator assures the greatest economy in operation. Design No. 1000, side elevation of which is shown above, is especially adapted to the needs of the dealer requiring not over 20,000 bu. capacity. Write for particulars.

Reliance Construction Co.
Board of Trade Indianapolis, Ind.

ANOTHER THORO-BRED
DESIGNED AND BUILT BY
THE MONOLITH BUILDERS, INC.

509 Mutual Building



Kansas City, Missouri

MACDONALD ENGINEERING CO.
DESIGNERS AND BUILDERS OF
GRAIN ELEVATORS
San Francisco Chicago New York
149 California St. 53 W. Jackson Blvd. 90 West St.

GEO. A. SAATHOFF
DESIGNER & BUILDER
OF GRAIN ELEVATORS
MAYER HOTEL PEORIA, ILL.

HICKOK Construction Co. MINNEAPOLIS ELEVATORS

Randolph Grain Driers
DIRECT HEAT OR STEAM CONTINUOUS FLOW MADE IN ALL SIZES
O. W. RANDOLPH CO. TOLEDO OHIO U.S.A.

HOLBROOK, WARREN & ANDREW
Successor to
Miller, Holbrook, Warren & Co.
Designing Engineers
Reinforced Concrete Elevators. Large or Small
Millikin Building . . . DECATUR, ILL.

Decatur Construction Co.
ENGINEERS AND BUILDERS
OF GRAIN ELEVATORS
760-762 Gushard Building
DECATUR ILLINOIS

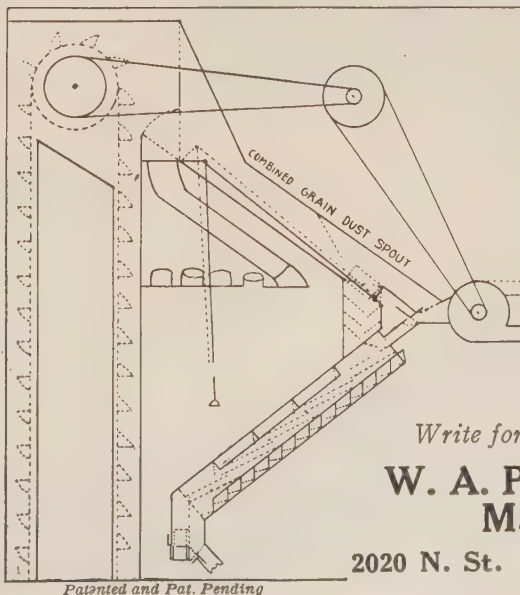
**SEND US
YOUR INQUIRY**

We have the most complete organization in the Northwest for the construction of

**GRAIN and COAL
ELEVATORS**

T. E. Ibberson Company
MINNEAPOLIS, MINN.

**COMBINED
Grain Cleaner and Dust Collector**



not only cleans, scours and conditions your grain, but permits you to keep your elevator free from dust. The fact that your grain can be worked before storing, with one elevation, and that the dust is not allowed to escape in your elevator, warrants your close investigation of this very efficient machine.

Write for descriptive literature

**W. A. Petteys Elevator
Machine Co.**

2020 N. St.

LINCOLN, NEB.

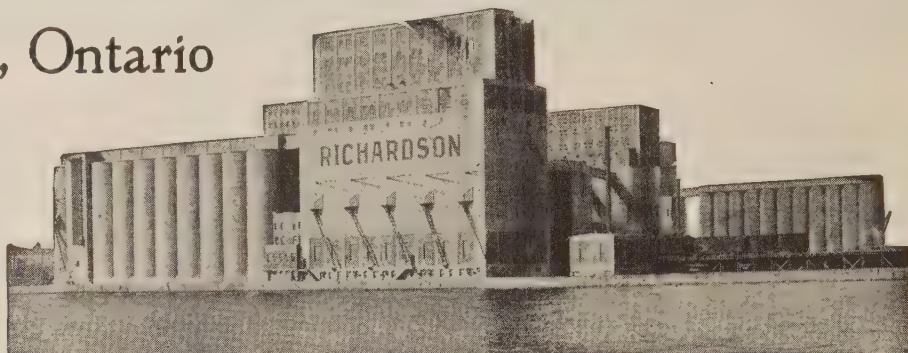
GROUP OF TERMINAL ELEVATORS BUILT RECENTLY BY US AT Port Arthur, Ontario

FOR

The Grain Growers' Grain Company.
Limited.
The Saskatchewan Co-operative Elevator
Co., Limited.
The James Richardson & Sons, Limited.

THE BARNETT-McQUEEN COMPANY, LIMITED

Designers and Builders of GRAIN ELEVATORS
Offices: Fort William, Ont., Duluth, Minn.
Minneapolis, Minn.

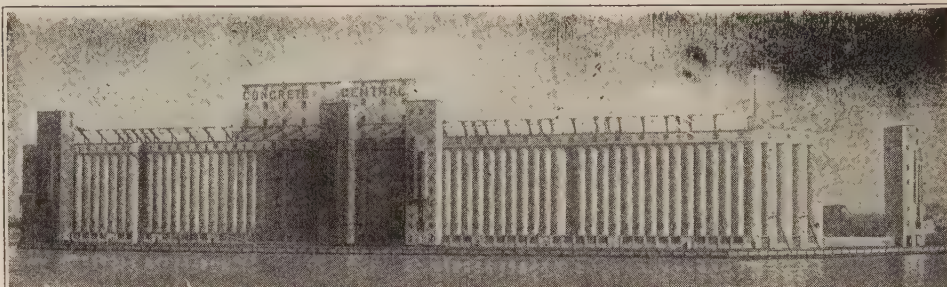


Monarch Built Elevators

assure you eco-
nomical design,
first class work,
efficient opera-
tion.

SATISFACTION

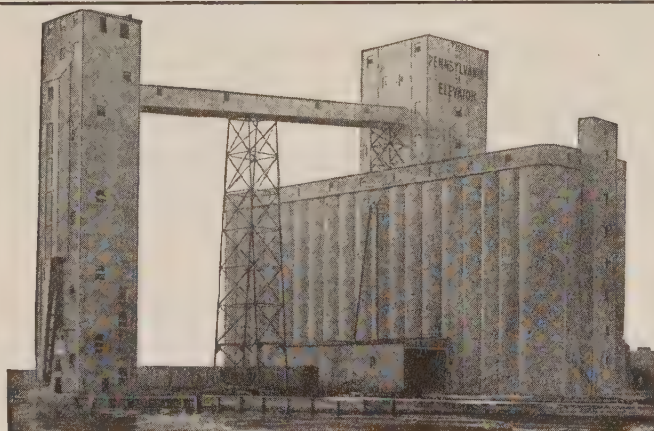
Let us Submit Designs
and Prices



Concrete Central Buffalo, 4,500,000 Bu.

One of the modern houses which has made a record for rapid and economical handling

MONARCH ENGINEERING CO., **BUFFALO, N. Y.**



Pennsylvania Railroad Co.'s Terminal
Elevator at Erie, Pa. 1,250,000 storage
capacity, with marine leg, 25,000 bu. re-
ceiving capacity. All concrete, modern
construction, with latest improvements.

Designed and built under the
direction of

Folwell-Ahlskog Co.

332 N. Michigan Ave. Chicago, Ill.

Write us for Estimates and Proposals

The Most Modern Elevator in the World

This is an aeroplane view of the Pennsylvania Railroad Company's new Northern
Central Elevator No. 3, located at Canton, Baltimore, Maryland, capacity
5,000,000 bushels. This elevator is equipped with

Four Stewart Link-Belt Grain Car Unloaders

See them in operation and be convinced of their great
saving in labor cost.

James Stewart & Co., Inc.

Designers and Builders
GRAIN ELEVATORS
In All Parts of the World

Grain Elevator Dept., W. R. Sinks, Manager
1210 Fisher Building, Chicago, Ill.

"We have built for many of your friends. Eventually we will
build for you. Why not now?"





New York State Barge Canal Terminal Elevator now under construction

\$148,345.00 saved by the State of New York in placing contract for this structure with us.
ADVANCED METHODS—INTENSIVELY DEVELOPED ORGANIZATION—MADE THIS POSSIBLE

FEGLES CONSTRUCTION COMPANY, Limited
Minneapolis, Minn. Fort William, Ontario



Buenos Aires Elevator Co.'s Terminal
Buenos Aires, Argentina

John S. Metcalf Co.

Grain Elevator Engineers

108 South La Salle St.
CHICAGO, ILL., U. S. A.

395 Collins Street
MELBOURNE, AUSTRALIA

54 St. Francois Xavier Street
MONTREAL, CANADA

Calle Maipu 639
BUENOS AIRES

BURRELL ENGINEERING & CONSTRUCTION CO.

DESIGNERS AND BUILDERS
ELEVATORS, FLOUR MILLS AND ASSOCIATED BUILDINGS
327 South La Salle Street, CHICAGO, ILL.

L. J. McMILLIN
ENGINEER and CONTRACTOR of
GRAIN ELEVATORS
Any Size or Capacity
523 Board of Trade Bldg., Indianapolis, Ind.

CONE-SHAPE GRINDERS

It PAYS to GRIND ALL GRAINS

Look to the Grinders. They do the work! Bowsher's Cone-Shape grinders are the correct principle in Feed Mill construction. They mean larger grinding surface close to center of Shaft; thus More Capacity, Lighter Draft, Longer Life.

"Desire to express my appreciation of the long-lasting, trouble-proof Bowsher. Have used a No. 4 ten years with less than One Dollar per year for repairs." *R. W. Watt, Jacobburg, O.*

10 sizes; 2 to 25 H. P. Write for free catalogue. GY
N. P. BOWSHER CO., SOUTH BEND, IND

LEE PETERSON
Marion, Iowa
Contractor and Builder
ELEVATORS and MILLS
REPAIRING A SPECIALTY
Plans and Specifications Furnished

For elevator and mill supplies we issue a net price catalog. If in the market write us for one.
WHITE ★ STAR ★ CO.
WICHITA, KANSAS

HORNER & WYATT
Designers of
Flour Mills and Grain Elevators,
Warehouses, Power Plants and
Industrial Buildings.
Preliminary Sketches and Estimates,
Valuations and Reports.
306 McMillen Bldg., Kansas City, Mo

BAD ORDER CARS

cause the loss of many hard earned dollars to shippers of grain and seed.

MUCH OF THIS LOSS can be saved by the use of Kennedy Car Liners. These car liners practically condition a bad order car and enable shippers to load cars that otherwise would be rejected.

KENNEDY SYSTEM of car liners prevent leakage in transit and we make car liners for all cases of bad order cars, consisting of full Standard Liners, End Liners and Door Liners.

WILL YOU NOT give us an opportunity to submit full details of our system and the low cost of same? We are confident this would demonstrate to you the efficiency and money saving merits of our proposition.

THE KENNEDY CAR LINER @ BAG CO.
SHELBYVILLE, IND.
Canadian Factory at Woodstock, Ontario.



(Patented)

Folwell-Sinks Form Lifting JACKS

For Grain Elevators and Silo Construction

Manufactured and Sold by

NELSON MACHINE CO.
WAUKEGAN, ILL.

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE.

WESTERN IOWA—Three elevators and loading station; fine territory; no competition. Address 48F12, Grain Dealers Journal, Chicago.

CENTRAL INDIANA—Good elevator, flour, feed and coal business for sale. Worth getting after quick. A. H. Richner, Crawfordsville, Ind.

FOR SALE—A No. 1 elevator at a bargain if taken at once. Track scales. Doing a good coal and feed business. Address 48F1, Grain Dealers Journal, Chicago, Ill.

SO. DAKOTA grain elevator, fully equipped, 25,000 bushels, wagon dump and hopper scales, gas engine, coal sheds; price \$2,000. C. J. Ward 514 Ashton Boul., Rockford, Ill.

SOUTHERN OKLAHOMA elevator for sale. Priced right if taken at once. Good coal business; large territory. Write for particulars. 47Y29, Grain Dealers Journal, Chicago.

CENTRAL ILLINOIS 20,000 bu. one man elevator, cribbed construction, Howe wagon scales in outside office; also good dwelling. Price and terms right. Address 48C3, Grain Dealers Journal, Chicago, Ill.

ELEVATOR FOR SALE—If you do not find the elevator you want advertised, place your wants in the "ELEVATORS WANTED" section and you will receive full particulars regarding many desirable properties not yet advertised.

SO. DAKOTA—Good cribbed 20,000 cap. elevator in Corsica, Douglas County, eastern S. Dak., for sale. Good territory to draw from. Was offered \$8,000 in 1918, will sacrifice now for \$4,500. Write to Jos. D. Hofer Elvtr. Co., Freeman, So. Dak.

FOR SALE AT A BARGAIN—CONCRETE and brick elevator and malt house, 150,000 bu. storage capacity, suitable for drying, cleaning and general storage of grain, manufacture of flour, feed or cereal products; transit rates; terms. Write A. J. Pick, West Bend, Wis.

MINNESOTA elevator and former malt plant at Minneapolis for sale. Plant in splendid condition. Fine switching facilities. Will sell at a sacrifice for quick sale.

The Title Guarantee & Trust Co., Cincinnati, Ohio.

CENTRAL IOWA—Six elevators on Chicago, Great Western R. R., handling grain, feed and coal; all modern equipment and in first class condition. The opportunity of a lifetime to purchase an old established and money-making business. Address 48D14, Grain Dealers Journal, Chicago, Ill.

OREGON—45,000 bu. elevator for sale, built in 1918; 2 warehouses of 25,000 bu. cap. each; handled 120,000 bu. grain last year; no other elevator for 12 miles; located in heart of an irrigation district; good location for side lines. Will sell outright or ½ interest to responsible party and pay him ½ salary to run it. Address 48A14, Grain Dealers Journal, Chicago.

CENTRAL ILLINOIS—Elevator plants for sale in the garden spot of the state. Land has sold for \$700 an acre. Plant consists of two elevators of 60,000 capacity each, almost new, both cribbed and in fine condition; wired for motor if wanted; now run by 20 h.p. Charter engine; brick engine room, brick oil house; side lines, coal, implements, retail grain business; coal sheds to hold 10 cars soft and 5 cars hard coal; implement bldg. 50x170. No competition any line. Selling account poor health. L. Box 36, Washburn, Ill.

ELEVATORS FOR SALE.

TWO ELEVATORS for sale, with good side lines, on main line railroad. Address 48A7, Grain Dealers Journal, Chicago, Ill.

ILLINOIS—Elevator at No. 1 grain point in Champaign County for sale. Address 48F26, Grain Dealers Journal, Chicago, Ill.

INDIANA—15,000 bu. cribbed elevator, iron clad, on private ground in southern county seat. Good grain, flour and feed business. Address 48C23, Grain Dealers Journal, Chicago.

A former Iowa elevator owner who advertised his plant in our "Elevators For Sale" columns writes in as follows: "I sold my plant to the first party answering my ad which I had in the Journal."

CENT. ILLINOIS elevator for sale, consisting of 15,000 bu. house, electric power, coal shed, office and wagon scales, all on my own ground. Will sell reasonable if taken at once. Address 48E6, Grain Dealers Journal, Chicago.

MISSOURI—15,000 bu. elevator for sale on Wabash R. R., in good territory; electrically operated; only elevator here; carry all side lines; doing good business. Want to retire. Address 47X16, Grain Dealers Journal, Chicago, Ill.

FOR SALE—Elevator 6,000 bu. capacity, located in good wheat belt on C. M. & St. P. R. R. near K. C.; also good feed business in connection. Priced right. Good reasons for selling. Address 48F11, Grain Dealers Journal, Chicago.

OKLAHOMA—Modern, up-to-date, cribbed country elevator for sale, with mill buildings and warehouse in connection, on Frisco lines in Oklahoma in a community that raises strictly wheat. Has big trackage, several lots, and best location in town. Address Hunter Mill Co., Hunter, Okla., for price and information.

ILLINOIS 20,000-bu. capacity elevator, located on C. B. & Q. R.R., for sale. Good coal and feed business in connection, with new feed house and coal storage. Elevator in fine condition and equipped with electric power, 2 dumps, 3 scales. Exceptionally fine location. Only elevator in town. Priced right. Address 47S15, Grain Dealers Journal, Chicago, Ill.

FOR SALE OR EXCHANGE.

HAVE four modern elevators in irrigated district of Wyoming. Will sell or trade for elevators in Central Nebraska. Address Box 597, Cheyenne, Wyo.

ELEVATOR FOR SALE OR RENT

MINNESOTA elevator of 25,000 bushels capacity for sale or rent. Located on C. M. & St. P. Ry. Coal and Feed business in connection Address J. J. Dobie, Mapleton, Minn.

ELEVATOR & MILL FOR SALE.

ELEVATOR & MILL at Kennard, Ohio, for sale. Address Mrs. J. L. Hewling, Route 3, Cable, Ohio.

FOR SALE OR EXCHANGE 25,000 bushel elevator and small flour mill, practically new, with good feed and flour business, in Illinois city of 5,000. Will take income property for part payment. Would consider a partnership with party of good record. Address 48F9, Grain Dealers Journal, Chicago.

MILL FOR SALE.

MODERN 100-BARREL MILL for sale; large territory. Rocky Mountain section; plenty of wheat. Feed mill in connection. Cheap power. Address 48B4, Grain Dealers Journal, Chicago.

ELEVATORS WANTED.

WANTED—Elevators at good grain points; will take side lines also. Address E. W. Davis, 513 N. Seminary st., Galesburg, Ill.

WILL BUY a well located elevator in the Northwest; might consider other sections. Address 48A2, Grain Dealers Journal, Chicago.

WANTED—Elevator. Fine level, well located 200 acre farm and 3 good residences in live towns, to trade separately or together. Address 48F8, Grain Dealers Journal, Chicago.

WILL BUY one or two elevators in Central or Western Kansas. Want good sized well-built houses in good territory. Give complete details and best price in first letter. Address 48F21, Grain Dealers Journal, Chicago, Ill.

AT GOOD POINT in Northern Indiana or Northwestern Ohio. State in full all details such as condition of buildings, equipment, distance of competition, other local competition, amount and kind of business handled in normal year and all other details. Would consider large retail coal and feed business in the location mentioned. G. Wolff & Sons, Hamilton, Ind.

ELEVATOR BROKERS.

JOHN A RICE **ELMER N. SMITH**
Elevator Brokers, Frankfort, Indiana.

WANT TO HEAR from owner having elevator or other business for sale. State cash price and particulars. John J. Black, 57th St., Chippewa Falls, Wisconsin.

CLAYBAUGH-MCCOMAS

Offices

Frankfort, Ind. Indianapolis, Ind.
223 B. of T. Bldg. 601 Board of Trade.

If you want to buy, sell or trade an elevator write us at either address.

ALWAYS HAVE ELEVATORS For Sale in the Grain Belt of Illinois and Eastern Indiana. If you are in the market write me fully and I will try to satisfy you.

JAMES M. MAGUIRE,
432 Postal Tel. Bldg., Chicago, Ill.

BUSINESS OPPORTUNITIES.

A REAL BARGAIN—Two complete grain elevators and feed mixing plants, molasses feed units, chicken feed units, hay grinding plant, chop mills, oat crimpers, etc., for sale. Will sell on easy terms. Plants located in best grain centers in the South. For particulars write to Kaucher, Hodges & Co., Memphis, Tenn.

IF YOU WANT TO BUY OR BUILD

an elevator, here is your chance. Will sell the remaining property, as follows: Lease, brick office 12x16x8 ft., one 5 ton outside Fairbanks scale, coal shed 16x40. \$750.00 will take it. This is a money proposition for party who has capital to build an elevator of 25,000 bu. cap. No crop failures. Up-to-date town. For further particulars write or come and investigate. P. O. Box 432, Oakes, No. Dak.

FLOUR FOR SALE.

MIXED CARS of flour and mill feeds in 100 pound sacks are our specialties. We are now manufacturing a full line of corn goods, cracked corn, feed meal, corn and oats chop, Ohio Farm feed, shelled corn and standard oats in connection with our flouring mill. Would like to send you a trial to convince you of the superiority of our products. Ansted & Burk Co., Springfield, Ohio.

SITUATIONS WANTED.

WANTED—Position as grain inspector. Address 47Z18, Grain Dealers Journal, Chicago.

POSITION wanted as manager of elevator; 10 years' experience; can furnish A1 reference; will come on 1 month's trial. Address 48F4, Grain Dealers Journal, Chicago, Ill.

MAN WITH long time experience in grain and milling business wants position as manager or assistant with some good grain firm. Address 48F23, Grain Dealers Journal, Chicago, Ill.

WANTED—Position as manager of a farmers elevator company; 10 years' experience in grain, lumber, coal and hardware. Address 48E10, Grain Dealers Journal, Chicago.

DESIRE position as manager of mill or elevator with sides lines; 18 years' experience inside and on the road; keep books. Address 48E12, Grain Dealers Journal, Chicago, Ill.

WANTED—Position by an experienced grain man in a well located farmers elevator after March 8th. None but an A1 place accepted Address 48A3, Grain Dealers Journal, Chicago.

POSITION as manager and bookkeeper of elevator; 11 years' experience grain, flour, feed and coal business; 38 years old; married; best of references. Address 48F16, Grain Dealers Journal, Chicago, Ill.

WANTED—Position by elevator man with 20 years' experience, understanding either steam or electric plants and the repairing of machinery. Best of references given. Address 48F6, Grain Dealers Journal, Chicago, Ill.

A man who has enough push to advertise his services in a high class trade journal is the kind you want. Look 'em over. You will find a competent manager, a reliable grain buyer or a qualified and efficient traveling solicitor.

MARRIED MAN, 50 years old, 15 years' successful experience as mgr. of Farmers Elev. Co., 12 years in place now employed, desires permanent position with good grain firm as solicitor or superintendent of elevator in the city. Address 48F25, Grain Dealers Journal, Chicago.

POSITION wanted about April 1st, in Colorado or Western Nebraska, by married man 37 years old, with 10 years' experience as manager of a farmers grain, coal and implement business. Best of references. Can give bond. Address 48C5, Grain Dealers Journal, Chicago.

I HAVE had a broad experience in the grain business. Operated a country station for 10 years and made it show a nice profit, and have had 5 years' experience in terminal markets. If you want a man to manage your elevator and make you money, write me and I will talk it over with you. Best references. Address 48F17, Grain Dealers Journal, Chicago, Ill.

POSITION by man of 15 years' experience in the merchandising and buying of grain. Complete knowledge of Eastern and Southern business and markets. Well acquainted with the elevator trade throughout Ohio, Indiana, Michigan and Illinois. Capable of taking charge of large grain department. Now employed, but can make change on 30 days' notice. Address 48F2, Grain Dealers Journal, Chicago, Ill.

HELP WANTED.

AN IOWA elevator company used a six line advertisement in the "Help Wanted" column of the Journal in one issue. They write as follows: "You sure did earn your money. We had only 88 applications for the place."

PARTNER WANTED.

WANTED—Young man with \$10,000.00 and knowledge of bookkeeping to take a working interest, with official position, in old established milling and grain firm. A splendid opportunity for the right man. For further particulars address 48E7, Grain Dealers Journal, Chicago, Ill.

TO TAKE one-third interest in established grain and coal business. Two good elevators doing big business in grain and side lines. Prefer man who can assist in management of the business or handle books. Answer if you have \$10,000 to invest. Address 48F22, Grain Dealers Journal, Chicago, Ill.

MACHINES FOR SALE.

SEPARATOR—Howes Eureka Dustless, No. 196; used only 2 years and in perfect order. Price \$100.00. A. Walton, Columbia, Va.

WRITE ME for prices on used Midgets. All kinds new and used mill and elevator machinery. H. C. Davis, Bonner Springs, Kansas.

Maroa Air Blast CAR LOADER for sale; capacity 1200 bu. per hour; used only short time. Price complete \$100.00. Porterfield & Sons, Hindsboro, Illinois.

WANTED to put your idle capital to work. That rusty machine over there in the corner is of intrinsic value to some member of the grain trade. You can make a sale or a trade if you use these columns.

DURABLE WIRE ROPE for sale, for car shovels; cast or plow steel. Manila rope, buckets and everything in elevator supplies.

PULLEYS, 1,000—for sale. ALL sizes, solid cast iron, wood and steel split. Standard Mill Supply Co., Kansas City, Mo.

MACHINERY BARGAINS.

One 50 barrel Midget Marvel Mill, fully equipped.

One 130 barrel Standard Wolf Mill with all equipment, including 75 h.p. motor.

Price on both or either 75% less than original cost. Must be seen to be appreciated. Write W. H. Wenholz Constr. Co., Hutchinson, Kans.

REAL BARGAINS.

Prompt Attention. Quick Shipments. When in need of elevator or mill machinery, notify us. We are headquarters for power and transmission equipment, and have on hand several well-known makes of motors, boilers, engines, etc.

Send us list of all your wants. We can supply you with full line of machinery for elevators, flour, corn and cereal mills. Complete equipments for modern mills of all kinds, molasses, stock, and poultry feed plants, plans, specifications, flow sheets, etc., our specialty.

Write us without delay.
Geo. J. Noth, Mgr.,
9 S. Clinton St. Chicago, Ill.

OIL AND GAS ENGINES.

LAWSON KEROSENE ENGINES—One 18 h. p. and one 10 h. p.; both in first class condition. C. R. Lewis, Springfield, Illinois.

25 h.p. FAIRBANKS MORSE OIL ENGINE, latest type Y, used six months, for sale. Miles Machinery Co., Saginaw, Mich.

STEAM ENGINE FOR SALE.

35 h. p. ATLAS horizontal steam engine for sale; 9x14, good condition, recently overhauled. Can be seen in operation at plant.

Union Gas & Electric Company,
Bloomington, Illinois.

STEAM ENGINES, BOILERS.

BARGAIN FOR QUICK SALE.

One 65 h. p. Center Crank Steam Engine with 80 h. p. High Pressure Boiler (new). Also Double Cylinder Snow Pump and all pipe connections, in first class condition. Write Farmers Union Co-op. Ass'n, Maple Hill, Kansas.

SCALES FOR SALE.

HOWE SCALE TEST WEIGHTS for sale. One ton (forty 50-lb. weights); good condition. Priced right. Chas. Love, Macon, Ill.

CHEAP FOR QUICK SALE—Fairbanks Registering Beam 100 ton R. R. scale, in good condition. Conover Grain Co., Conover, Ohio.

SECOND HAND SCALES for sale of any make, size, or price, always find ready buyers when represented in the "Scales For Sale" columns of the Grain Dealers Journal.

BAGS—BAGGING—BURLAP.

GRAIN BAGS FOR SALE.

4,000 second hand cotton grain bags for sale; 16 oz., 25c each f. o. b. St. Louis in large or small lots. Foell & Company, 123 Market street, St. Louis, Mo.

BURLAP BAGS OF EVERY KIND FOR SALE; new or second-hand, plain or printed with your brand; seamless Cotton Grain Bags; Sample Bags; Burlap, Cotton Sheeting or Paper for Car Lining, etc. Wanted: Second-hand bags, best prices paid.

WM. ROSS & CO., 409 N. Peoria St., Chicago.

OFFICE APPLIANCES.

SAFES—Large stock of new and used safes on hand. Protect your valuable papers. Prices reasonable. The Howe Scale Co. of Ill., 512-514 St. Charles St., St. Louis, Mo.

WOOL WANTED.

ELEVATOR OPERATORS who have wool to ship will find it to their advantage to tell the 6700 regular readers what they have to offer. An advertisement in this column will cost you but 25c per type line per insertion.

Since 1893
28 Years
Manufacturers
of Scales



COLUMBIA MOTOR TRUCK SCALES Are the BEST—"SAVE REPAIR BILLS"

Because they are easy to build, simple in construction, well made and retain their accuracy longer than any scale on the market. COLUMBIA SCALES are being used by practically every feed, coal, ice and material dealer in Chicago. THERE MUST BE A GOOD REASON.

COLUMBIA SCALE COMPANY

Telephone Albany 4
2437-43 N. Crawford Avenue

F. Beuckman & Son, Props.

CHICAGO, ILLINOIS

Save money and send for list of our guaranteed rebuilt scales. All makes and capacities. Tell us what you want. Let us repair your scales—any make. We also carry parts. Finest equipment for scale work in Chicago.

SEEDS FOR SALE—WANTED

Field and Grass
Seed Trade Directory

ARNHEM, HOLLAND.

Wm. E. Busgers & Co., European fancy natural gr. ad.

ATCHISON, KANS.

Manglesdorf Seed Co., The, wholesale seeds.

BALTIMORE, MD.

Wm. G. Scarlett & Co., wholesale seed merchants.

BUFFALO, N. Y.

Stanford Seed Co., Inc., The, wholesale field seeds
Whitney-Eckstein Seed Co., wholesale seeds.

CHICAGO, ILL.

Dickinson Co., The Albert, seeds.
Illinois Seed Co., The, grass and field seeds.

CINCINNATI, OHIO.

McCullough's Sons, The J. M., field and garden seeds

CONCORDIA, KANS.

Bowman Bros. Seed Co., field seeds.

COUNCIL BLUFFS, IOWA.

Ouren Seed Co., wholesale seeds and grain.

CRAWFORDSVILLE, IND.

Crabbs Reynolds Taylor Co., grass and field seeds.
Crawfordsville Seed Co., seed merchants.

ELKHART, KANS.

Muncy & Carson, grain and seeds.

KANSAS CITY, MO.

Peppard Seed Co., J. G., wholesale seeds.
Tobin Seed Co., alfalfa—bluegrass.

LOUISVILLE, KY.

Hardin, Hamilton & Lewman, grain and field seeds
Louisville Seed Co., clover and grasses.

MILWAUKEE, WIS.

Courteen Seed Co., field seeds.
North American Seed Co., wholesale grass & field seeds.

MINNEAPOLIS, MINN.

Dickinson Co., The Albert, seeds.

NEW YORK, N. Y.

Julius Loewith, Inc., grass and field seeds.
Nungesser-Dickinson Seed Co., wholesale seed merchants

PHILADELPHIA, PA.

Philadelphia Seed Co., Inc., The, wholesale field seeds.

ST. LOUIS, MO.

Agricultural Seed Co., cow peas.
Mangelsdorf, Ed. F. & Bro., wholesale field seeds.

ST. PAUL, MINN.

Jameson Hevener Co., shippers of field seeds.

SIOUX FALLS, S. D.

North Western Seed Co., wholesale field seeds.

TOLEDO, OHIO.

Churchill Grain & Seed Co., field seed, popcorn.
Flower Co., The S. W., seed merchants.
Hirsch, Henry, wholesale field seed.
Toledo Field Seed Co., The, clover, timothy.

SEEDS FOR SALE—WANTED

WANTED TO SELL—About 25 tons clover
seed screenings.A. R. Kerr & Company,
Bellefontaine, Ohio.SEED CORN grown from disease-free seed.
Only \$2.45 per bushel.E. G. Lewis Seed Co.,
Media, Illinois.FOR SALE—Any quantity and quality of Seed
you want to purchase. If you don't find what
you want in the "Seeds For Sale" section, ad-
vertise for it.

ARTHUR G. DUNN,

82 Wall St., New York.

Headquarters for SUNFLOWER Seed in
carload lots and less than carload lots,
spot or future delivery.The J. M. McCullough's Sons Co.
BUYERS — SELLERS
Field and Garden Seeds
CINCINNATI - - OHIO*If you want regular country ship-
pers to become familiar with your
firm name, place your "ad" here.*

HAY WANTED.

COURTEEN
SEED CO. Milwaukee,
WisconsinClover, Timothy, Grass Seed
Grain BagsCOW PEAS
Agricultural Seed CompanyRepresenting 57 Years'
Continuous Seed Service

Main and O'Fallon Sts. ST. LOUIS, MO.

North American Seed Co.
WHOLESALE GRASS & FIELD SEEDS
Milwaukee, Wisc.
"THE HOUSE OF QUALITY"

The Toledo Field Seed Co.

Clover and Timothy Seed

Consignments solicited Send us your samples
TOLEDO, OHIOIMPORTERS EXPORTERS
GRASS and
CLOVER SEEDBuyers and Sellers of Timothy, Red Clover,
Alsike, Alfalfa, White Clover, etc.
NUNGESSER-DICKINSON SEED CO.
New York, N. Y., U. S. A.

LOUISVILLE SEED COMPANY

INCORPORATED
LOUISVILLE, KY.Headquarters for
RED TOP AND ORCHARD GRASS
BUYERS AND SELLERS
OF ALL VARIETIES FIELD SEEDSI Am the Man
You WantI can fill that position you
have open—fill it perfectly,
to your satisfaction. Tell
me where to find you in aGrain Dealers Journal
Want Ad.

A Trial Order

GRAIN
DEALERS JOURNAL

305 So. La Salle St., Chicago, Ill.

Gentlemen:—I wish to try the *Grain Dealers Journal* on the
10th and 25th of each month for one year just to learn if I can get
any helpful suggestions from the opinions and experiences of other
grain dealers. Enclosed please find Two Dollars.

Name of Firm.....

Capacity of Elevator

Post Office.....

..... bus.

State.....

Use Universal Grain Code and Reduce Your Tolls.

SEEDS FOR SALE—WANTED

SEED

*We Buy
and Sell
all Varieties
of Grass
and Field
Seeds*

The Albert Dickinson Co.
MINNEAPOLIS CHICAGO

HENRY HIRSCH
WHOLESALE FIELD SEEDS
CLOVER — ALSIKE — TIMOTHY — ALFALFA
Our Specialty
All Other Field Seeds
TOLEDO — — OHIO

Council Bluffs Seed Co.
SEED CORN--NOTHING ELSE
Standard Iowa and Nebraska
Varieties. Ensilage
Council Bluffs Iowa

Missouri Grown Blue Grass
Kansas Grown Alfalfa, New Crop
We are now prepared to accept orders for both
TOBIN SEED CO.
KANSAS CITY, MO.

The Mangelsdorf Seed Co.
Sweet Clover, Alfalfa,
Soudan Grass, Millet, Rape.
ATCHISON KANSAS

CRAWFORDSVILLE SEED COMPANY

CRAWFORDSVILLE, INDIANA

We are in the market for Red Clover. We can use seed mixed with Buckhorn. Mail samples with lowest prices.

Members Wholesale Grass Seed Dealers' Association.

WHITNEY-ECKSTEIN SEED CO.

Wholesale Seed Merchants

BUFFALO, N. Y.

CORRESPONDENCE INVITED

The Stanford Seed Company, Inc.

Wholesale Field Seeds :: **BUFFALO, N. Y.**

RUDY PATRICK SEED CO.

BUYERS AND SELLERS

Alfalfa, Sweet Clover, Red Clover
Timothy, Sudan, Millet and Cane
KANSAS CITY, MO.

OUREN SEED CO.

Council Bluffs, Iowa

Buy and Sell Red, White and Alsike
Clovers, White and Yellow Blossom
Sweet Clover, Alfalfa, Red Top, Blue
Grass and all Seed Grains

Crabbs Reynolds Taylor Company

CRAWFORDSVILLE, INDIANA

Buyers and Sellers
CLOVER AND TIMOTHY SEED — GRAIN

THE ILLINOIS SEED CO.

CHICAGO, ILL.

WE BUY AND SELL

Field Seeds

Ask for Prices

Mail Samples for Bids

HEADQUARTERS

on all

Imported

Clover

Grass and Field

SEEDS

Julius Loewith, Inc.

150 Nassau Street New York, N. Y.

(Formerly Loewith, Larson & Co.)

The S. W. Flower Co.

WHOLESALE

FIELD SEED

MERCHANTS

SPECIALTIES

RED CLOVER, TIMOTHY
ALSIKE

TOLEDO

OHIO

J. G. PEPPARD SEED COMPANY

Buyers SEEDS Sellers

Correspondence Invited

KANSAS CITY, MO.

SEEDS

Any And Every Kind

Carload and Less

THE NEBRASKA SEED COMPANY, OMAHA, NEB.

ENOZ

KILLS MOTHS

THE ENOZ METHOD

Start by cleaning up thoroughly. It is advisable to use Enoz Special by spraying all the open locations infested. Reach the dark warm locations and spray in sufficient quantities to allow for thorough penetration. It is well to use Enoz in the bins and chutes when empty, and do not put grain in them until liquid has completely dried out and the locations aired. In this manner you will obtain the penetration of the liquid and destroy the insects and eggs that are hidden in the cracks. Enoz should not be permitted to contaminate by contact or by fumes. Don't try to confine to fumes.

Weevac Gas Fluid can be used on infested grain and all locations where gas can be confined for 8 hours or more. It is sprayed and the gas forms by evaporation. This is rapid in any temperature. Weevac gas is heavier than air and sinks to lower levels. It piles up as volume increases and will fill completely if sufficient quantity is used. Confine gas as long as possible.

Allow 1 gallon of Enoz for each 400 square feet and 1 ounce of Weevac for each 5 cubic feet of confined space.

The ENOZ method exterminates Weevil, Moths and other grain insects. ENOZ Special Moth Liquid and Weevac Gas Fluid (the finishing touch) are safe to use, easy to apply, non-explosive and not dangerous to the operator.

Insect depredations cost 5% of each crop. Now is the time to save this loss and damage, as well as trouble later. You will overcome many times, the slight expense involved. Start your efforts now. Catch the insects inactive or dormant. Destroy the eggs which will hatch later if you don't.

It is up to you to judge the merit of these compounds. And it won't cost you one cent if the Enoz method is not effective.

Write us for prices on larger quantities. Give us particulars regarding your elevator infestation. We will advise you how to best overcome it. Also: Our free book, "Mill infestation and its control" will interest you.

ENOZ CHEMICAL COMPANY (G.D.J.-3-25)
705-7 N. Wells Street, Chicago.

As per your special trial offer ship me:
5 gals. Enoz Special Moth Liquid
5 gals. Weevac Gas Fluid
Baby Fountain Sprayer
..... cans Rat Finis.

I will use them in sufficient quantities to give them thorough test. If they do not meet your claims I will return remainder within 30 days and you agree to cancel bill.

Name

Town

Business

Special Trial Offer

We will ship you 5 gallons of Enoz Special Moth Liquid at \$18.50 F.O.B. Chicago, and 5 gallons Weevac at \$20 F.O.B. Chicago. With your first order one Baby Fountain Sprayer will be included without any charge. Test these processed compounds and learn how well they do all we claim for them. Should you then fail to be convinced return remainder within 30 days and we will cancel bill.

Rat Finis finishes rats and mice, 14 oz. can \$1 -6 for \$5.

ENOZ CHEMICAL CO.
705-7 N. Wells Street CHICAGO

GRAIN DEALERS' JOURNAL

309 So. LaSalle Street, Chicago, Ill., U. S. A.
Charles S. Clark, Manager

Published on the 10th and 25th of each month in the interests of better business methods and improved handling facilities for progressive wholesale dealers in grain and field seeds.

SUBSCRIPTION RATES to United States, semi-monthly, one year, cash with order, \$2.00; two years, \$3.60; three years, \$5.00; single copy, 15c.

To Foreign Countries within the Postal Union, Canada and Mexico, prepaid, \$2.75.

THE ADVERTISING value of the Grain Dealers Journal as a medium for reaching progressive grain dealers and elevator men is unquestioned. The character and number of advertisements in each number tell of its worth. If you would be classed with the leading firms catering to the wholesale grain trade, place your announcements in the Journal.

Advertisements of meritorious grain elevator machinery and supplies and of responsible firms who seek to serve grain dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain trade, news items, reports on crops, grain movement, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. Address "Asked-Answered" department. The service is free.

CHICAGO, MARCH 25, 1922

GOODBYE U. S. G. G. Inc., Goodbye.

THE MORE careless the holders of fire insurance policies, the more must they pay for their insurance.

GRAIN DEALERS of States collecting taxes on property held April 1st will try to empty all bins this week.

"ADJUSTED COMPENSATION" would be a good name for a bill to reimburse grain shippers and farmers who suffered loss by the government fixing of the price lower than the market price.

THERE is no limit to the U. S. Department of Agriculture's wandering from its legitimate function of improving plant and animal production. Besides advising the farmer to quit the farm and engage in marketing the Department in January printed a circular No. 207, entitled "The Paper Dress Form," containing, it states, "Directions for making gummed paper dress forms, and is suitable for general distribution." What has dress-making got to do with Agriculture?

FREE SEEDS will be forced upon a long suffering public again unless more members of the lower house develop sufficient backbone to vote against this waste. Recently the provision for free seeds was put back into the agricultural appropriation bill by a vote of 145 to 65 after it had been dropped. If Congressmen recognized the fact that the stuff they have been distributing alienates more voters than they hope to win, the distribution would be stopped.

CLIFFORD THORNE may continue to receive attractive fees from different farm organizations, but his hope of obtaining a perpetual revenue from all the grain marketed through the U. S. Grain Growers, Inc., seems to be doomed.

FILING CLAIMS with original documents attached is a practice that always is accompanied by the hazard the papers will be lost by the railroad company. Their destruction by fire is not impossible. In the fire-proof office building of the Burlington Route at Chicago recently the heat was so intense the steel filing cabinets melted when fire was started from a building across the street and all records were burned. It is safer to file copies of the originals with claims.

THE controversy in fire insurance circles over the Underwriters Grain Ass'n is largely an insurance matter, but the owners of terminal elevators have a real interest in it because its outcome may affect favorably or the opposite. The elevator operators are getting much better service now than under the old system of handling the business, and better service to those who pay the bill should be the only measure of value in this matter.

THE WILLINGNESS of the average farmer to intrust his business to any governmental agency is inexplicable, but their attitude in the United States seems to be no different from that of the farmers in Canada, who are now pushing a resolution introduced in the House of Commons at Ottawa, by J. F. Johnson, calling for the reestablishment of the Canadian Wheat Board, an autocratic, impractical institution much like our U. S. Grain Corporation. The war is over and not even a slight excuse now remains for the reviving of such wasteful, expensive impractical means of marketing grain.

A CODE to regulate the installation of lightning protection equipment is to be worked out by a com'te recently appointed by interested official and commercial agencies, thus bringing lightning rods and kindred devices from the state of disrepute to which they were forced by scheming crooks and placing them on a plane that will be commercially and scientifically practical. An advance step like this deserves the highest commendation. When the code shall have been prepared it should result in removing the last objections of the rodding of buildings, thus reducing the appalling fire loss of grain elevators materially.

PLANS for the 1922 International Grain & Hay Show are now well in hand, and the officials in charge expect to make the exposition this year greater than any of its predecessors. The grain dealer can find in this Show an opportunity to serve his patrons effectively, and at the same time to help his own business. He should make certain that the farmers of his community know about the Show, and should induce them to enter their meritorious products. Not every entrant will win a money prize, of course, but the educational features of the Show are worth far more than the figures displayed on the premium lists, and the benefit of these features will reach down thru innumerable years to come in their effect on American grain production.

THAT useless appendage of Congress, the Federal Trade Com'ish has not yet reported on the profits and losses of the export grain trade, but no doubt its lame sleuths are investigating and will report years hence, when everyone interested has forgotten about the matter. What a farce our politicians make of many governmental activities.

PARCEL POST marketing of farm produce no longer enjoys the furore of favor with which the federal government a few years ago greeted this avenue of enlarging its activities. The joint postal commission announced Mar. 23 that the post office is losing money heavily in this attempt to carry freight by mail. With this incubus removed it might be possible to return to the simple 1 cent per pound on magazines, and do away with the zone system that is sectionalizing the thought of the United States.

BETTER farmer-banker relations are sought by the Ohio bankers, and henceforth their organization will issue a bulletin each three weeks to be distributed to the press of the state. While such propaganda may help draw the two interests closer together, we believe that the grain dealers of the land would promote the interests of themselves and their farmer patrons much better if each individual grain buyer would keep in communication with his farmer patrons both by mail and phone. The more confidence the grain growers have in the operators of country grain elevators, the less money will they invest in blue sky marketing schemes of traveling solicitors.

THE ELEVATOR burned, in 11 cases reported elsewhere in this number of the Journal, because there was not enough of the right kind of care on somebody's part. Americans, proud of being first in so many worthy achievements, should find an excellent cure for boastfulness in our position as the world's premier destroyers of life and valuable property by fire. Last year we exceeded our own best previous record. We are going strong in 1922. We will not halt in our mad race until we burn up so much property that the remainder is insufficient for our needs, unless we make this the individual matter that it is and practice individual carefulness always and in all ways.

THE controversy over freight rates on grain for export to Galveston and New Orleans from the Southwestern region is but a new phase of a problem that has existed for years, and that will continue perhaps for many more years to come. Galveston, for some reason or reasons not readily apparent to the average person, has persistently refused to construct grain handling facilities sufficient to handle the volume of grain that might be shipped to that port. Indeed, Galveston has seldom been able to handle the crop of any year without congestion troubles for longer or shorter periods. Why, until Galveston puts herself in position to handle the grain, should she seek to make it practically impossible for that grain to move to another point of export? If Galveston will do her part in preparing for the business—and if the railroads entering Galveston will do their share—the grain trade of the Southwest will look with much more favor on her demand for a freight differential under New Orleans.

THE FARMERS bloc may enact many laws supposed to favor the farmer and injure the rest of our citizens, but the rest of the nation is bound to resent the discrimination in a way that will not help either the farmers or the bloc.

COUNTY AGENTS at \$1,200.00 per month are proving so expensive that many farmers are declining to contribute. One Iowa county agent, whose financial statement is given in condensed form elsewhere in this number, cost the grain growers more money than all the grain marketing agencies heretofore.

WHEN he was passing from senatorship to judgeship, William S. Kenyon took occasion to state a fact that has been known to practically every interested person for a long time, namely, that Washington swarms with self styled "farm leaders" who really have little influence at home. The man in the street is wondering why other congressmen do not discover the same fact, and why Senator Kenyon did not voice his recognition of it many months ago.

DECISIONS of the courts are to the effect that, in a purchase and sale made by telephone the contract is embodied in the terms expressed in the telephone conversation itself, and not in confirmatory documents that pass between the parties afterward. The fact remains, however, that frequently the only positive evidence of the terms agreed upon will be found in the confirmations exchanged by the traders; and it is because of this that confirmations should be checked and discrepancies corrected while the matter is still fresh in the mind of both traders. The grain dealer who fails to examine every confirmation coming into his office is not dealing fairly with himself or his customers.

THE VOLUME of our agricultural exports increased in 1921, when measured in terms of units of quantity, altho their value in dollars was less than in the preceding years. Our domestic business, too, was of good volume, but lower in value. There is much that is significant in these facts, and there is reason to believe that much of our thought of depression has existed because of the psychological effect of the lessened value rather than because of an actual decrease in the amount of business we have been doing. While we cannot disregard value as an item in our reckoning we must not allow value to outweigh volume, which is of equal if not greater importance.

SEVERAL assn's of grain dealers will hold their annual conventions during the next few months. Problems that are of interest to every person concerned with the physical handling of grain and with the methods of conducting the grain business will be discussed. There is not one grain dealer who knows so much about the business that he cannot benefit by the ideas of his brother dealers; and few are so uninformed that they cannot give out some thought that will be helpful to the trade as a whole. It is the duty, then, of every dealer to attend the convention of his ass'n, and to take part in all the sessions. And because it is a pleasant duty with profit in its performance it is not too early to begin making plans for discharging it.

HIGH RATES of freight and cost of fuel are now recognized as the most active factors interfering with the revival of shipping. Grain shippers should take advantage of every opportunity to protest.

TAXES levied upon business have been so burdensome during recent years as to discourage all business enterprise and check the inauguration of new ventures. If Congress would but adjourn and mix with the folks at home for a time its members would return to Washington more content to stop wasting money and enact new legislation which would cut off all the unnecessary appropriations.

IOWA'S law regulating rentals for sites of elevators on railroad right of way by conferring jurisdiction on the state railroad commission was attacked in the lower courts by the railroad attorneys as not within the constitutional power of the state. In support of such regulatory legislation on rentals the Supreme Court of the United States in a decision given Mar. 20 went even further by holding the New York law regulating rentals of dwellings and apartments to be valid. If this opinion that privately owned houses are subject to legislative control of rentals is just, how much more so is a law such as that of Iowa, regulating the rentals charged by a public utility such as a railroad corporation for sites on the right of way.

HONEST students of grain marketing, men who considered our distributing system fairly and impartially, have ever agreed upon one major fundamental. They assert positively that the present system of grain marketing is more economical than any other the world has known. It is wholesome, however, to find an influential farm publication taking the same stand; and the statement appearing in that publication, as published elsewhere in this number of the Journal, marks a distinct forward step and one that heralds the beginning of a period when sane thought shall prevail and when self seeking demagogues will find their followers constantly dwindling in numbers. The open competitive system of marketing grain has vindicated itself by functioning helpfully to producer and consumer alike, even while the agitators sought to tear it down.

AN ERROR in the Nebraska law prescribing the legal bushel was repeated in enacting the new law now in effect, so that the standard in that state is 0.42 cubic inch less than the bushel in every other state, the legal bushel elsewhere being 2,150.42 cubic inches, against 2,150 in Nebraska. The difference might be comparable to the thickness of a sheet of tissue paper pasted in the bottom of the grain buyer's tester kettle. Strict compliance with the law works against the Nebraska farmer and in favor of the dealer who ships out of the state. The difference is enough to invalidate the sealing by the state sec'y of agriculture if he uses the regular standard in sealing grain men's testers, tho it will not amount to more perhaps than grading down one grade on one wagon load out of 4,000. It is a sad commentary on the intelligence of our lawmakers that they do not know a bushel is a measure 8 inches deep and 18½ inches internal diameter.

FEED MILLS for community service in the grinding of grains grown locally will soon be almost as common as grain elevators. This does not mean that the manufacturer of scientifically balanced rations will be crowded out by the home feed grinder, because the two serve differing needs and can thrive simultaneously. It does mean that somebody in each community will install a feed grinder. The opportunity goes first to the local grain elevator operator, because he is the logical person to render the service, but if he fails to grasp it the community jack-of-all-trades will not hesitate to attack the problem. If the elevator operator waits he will have only himself to blame for the regret that will come later.

STABILIZATION OF PRICES for wheat, corn and cotton is sought by a ridiculous bill introduced by Rep. Knutson. This bill would authorize a commission composed of the secretaries of Commerce, Agriculture and Labor to borrow up to a half billion dollars from the federal reserve banks for the purchase of these commodities. Of course such governmental buying would boost values and it may be that consumers at home and abroad would resent the interference sufficiently to depress market prices below the purchase prices paid by the government. At any rate, the new buying power would be an unnatural factor in the market, and the mistakes made would incur sufficient expense upon the government to greatly increase the cost of these products to the tax payers of the land. The less government interferes with the marketing of grain the less expensive it will be and the more promptly will market prices respond to the influence of supply and demand.

The U. S. G. G. Imbroglia.

The discord that came to a head during the recent annual meeting of the U. S. Grain Growers, Inc., was not a surprise to those who have followed the organization's movements since it was launched about a year ago. The discontent did not develop at the meeting, but rather burst into prominence there, after having existed in a less apparent form since the conference was held to ratify the plan submitted by the Com'ite of 17.

The situation as it exists today should furnish an object lesson to farmers. It does not show that farmers are incompetent of conducting their own business, as some might contend, but that the plan of the U. S. Grain Growers, Inc., is not and can never be successful in reorganizing grain marketing machinery. It shows, moreover, that the plan of the U. S. Grain Growers, Inc., is unwieldy, and that it offers opportunity for the intervention of personal and factional strife that would preclude the possibility of successful functioning in competition with well established business institutions having always the desire to become more efficient and more economical.

The cost of the work up to this time is staggering. The cash exhibit submitted by Mr. Eckhardt showed that on Mar. 21 net cash expenditures were \$607,486; while known unpaid items then totaled more than \$78,000. Surely, a scheme that has cost \$685,000 without having yet made itself ready to function

in the actual handling of grain is an expensive pet. The farmers of the United States who have furnished this vast amount of money will scan more carefully the next agitators' scheme that is presented to them as a bait to entice their bank accounts into the agitators' hands.

Another dream is passing. The open competitive system of grain marketing continues its forward and progressive march, rendering efficient and economical service alike to producers and consumers of grain.

Still other dreams may come and go; but the marketing system that has been forged under the hammer blows of merciless experience has not been supplanted and it never will be supplanted. Evolution, and the further hammering of experience, will perfect it here and alter it there, but the high sounding phrases of theorizing idealists will glance off as pebbles thrown against a marble cliff.

Centralization.

During the progress of the freight and passenger rate hearings which the Interstate Commerce Commission has been conducting since early in the year, R. H. Aishton, pres. of the American Railway Ass'n made some remarks about certain features of government control of the railroads during the war. The principle underlying Mr. Aishton's statements is one of the most important of all economic truths, and of special interest just now when certain leaders of farmers organizations are preaching their false doctrine of centralized sales agencies for farm products.

Mr. Aishton, who was federal manager of the northwestern region during the period of government control of the railroads, said that centralization of purchases by the government was met by the creation of a central selling agency by the sellers, this resulting in the elimination of competition in selling.

There is another evidence of the application of this same truth in the war time creation of our Grain Corporation, which was advocated and finally established as a necessity in our dealings with centralized grain buying by European governments.

If additional proofs are needed that centralization of selling will bring about a corresponding centralization of buying they are available; but these two cases should be sufficient to prove the principle.

No better idea can be obtained of what will eventually happen if the sale of grain is centralized in the control of one or a few organizations than by study of what Mr. Aishton said and by reflection upon the reasons for the organization of the Grain Corporation. If the farmers of America permit their self-selected and misguided leaders to set up centralized selling agencies they should expect that ultimately buyers will likewise pool their interests. There would then be only two colossal agencies to handle the whole business of grain buying and selling; competition would be eliminated; prices would reflect the state of the balance of power between the two agencies and never the free play of the law of supply and demand; and there would be the greatest opportunity of all time for individual graft and crookedness to thrive.

Does the American farmer want this condition?

Grain Inspection Not Yet an Exact Science.

The complaints made against the lack of uniformity in the grading of wheat in the Southwest and against the irregularity in grading corn at Peoria are too well founded on fact to be ignored by the administration at Washington, which thru its licensing system has made itself responsible for the work of hundreds of individuals.

Some of the ablest merchants in the grain trade have recognized the fact that it is human for an inspector to err and natural for grain to go out of condition; and instead of attempting to cure the fundamental defects of the grading system have protected themselves by selling what they buy. They do not buy by grade and sell by inspection certificate, rather the reverse. Neither do they buy an inspection certificate at an interior point and sell on the inspection at a remote terminal. The margin of profit in this conservative method of doing business is so microscopic that merchants, whether they are buyers or sellers, are constantly courting loss by taking a chance on the inspection.

For the benefit of the greater number of dealers who sell by grade an honest endeavor should be made to remove the uncertainty attaching to inspection as at present conducted. This uncertainty extends all thru the federal supervision service from the original inspector at an interior market holding a federal license, thru the supervisors at the terminals enjoying federal salaries and to the highest authority, the federal board of review. On the same wheat in an elevator at Fort Worth the Board of Review reversed itself, calling it dark hard at one time and hard wheat at another.

It is a commercial axiom that the more there is of anything the cheaper, relatively it becomes. So that when a crop contains a large percentage of low grade, and the low grading is due to one single factor such as excessive heat damage, the discounts on such low grades become ruinous. It is the big discount due to the factor making the low grade that focuses the thought of the trade on the lack of uniformity in interpreting the rules of federal grading on that factor of heat damage, for example.

Federal inspection pretends to be an exact science, which, with all due respect to its authors, it is not and never will be. The chemists in their cloistered laboratories may have leisure to employ elaborate tests, but the country grain dealer who climbs on the farmer's wagon to price the load of wheat will have none of his test tubes. He has not time for such refinements in the hurly burly of business. If the U. S. Dept. of Agriculture undertakes to incorporate more chemical language into grain grading rules it will run against the stone wall of the impossibility of requiring the country dealer to buy on a terminal market grading that he can not apply in his own purchases from the grower. The buyer can not hand-pick the wagon load.

Grain grading rules are drawn up from various standpoints. One argument in favor of some rule is that it will penalize the grower who is careless; another rule is favored because it gives the miller some guaranty of milling value, but the grain dealer's interest is in uniformity. The grain dealer is willing that the rules should be made to favor all interests concerned, but he does want the rules to be interpreted the same way at all times and in all markets, UNIFORMLY.

In view of the fact that inspectors do not agree among themselves on first handling a new crop that contains a factor not in evidence on the preceding two or three crops it is evident that some better method must be devised for informing the inspectors than mere study of the rules. It has been the trade's experience that the inspectors become experienced on a crop only after a considerable portion of that crop has already been handled or mishandled. The inspectors should be in possession of exact instructions in writing covering in detail all points upon which controversy might arise. If words fail to convey the definite delimitation of factors recourse should be had to such means as are available, including a sufficiency of type samples, samples of gradation of color and chemical test for heat damage.

This text book on grain inspection should not be a part of the rules. Its purpose should be directed solely to affording the isolated inspector a means of satisfying himself that he has in his own hands the certain means of making his own grading conform to the standards. That education of the inspector is the real secret of uniformity is borne out by the experience of the inspection efficiency division of the supervision service of the Dept. of Agriculture. Those inspectors at larger markets working constantly with one of the federal supervisors at hand are doing more uniform intermarket work than the isolated inspectors, due to the educational influence, not that the supervisors know any more of grain inspection than the inspectors, but they are more closely in touch with what is the thought at the central headquarters, and this makes for uniformity.

The inspector has an authorized, tho not accurate method of determining the percentage of moisture. Now let the scientists provide the inspectors with exact methods of measuring every other factor entering into inspection, not necessarily for use on every sample graded, but for the inspector's own education and information. If perfected, the Board of Review could be done away with, except as a check on fraud.

Will Check Railroad Extortion.

The greed of the railroads traversing Illinois, in the matter of ground rentals, has been growing so fast that many of the sufferers have at last become really alarmed. Jumping the annual rent for a small plot of right of way from \$5.00 to \$300.00 a year is enough to give most country grain dealers a real shock. But the railroad agents, who thrive on the delusion that they are not to be interfered with, have continued to raise the rentals.

The protest of owners of Illinois elevators located on railroad rights of way have been so vigorous that the Illinois Commerce Commission has finally taken recognition of the extortion and will shortly conduct a hearing for the purpose of determining what is a fair rental. Doubtless every Illinois sufferer will be glad to contribute all the information at his command.

While the question of rentals is under consideration it would seem timely to protest just as vigorously against the unreasonable charges levied for so-called track frontage. One dealer whose rent had been increased from \$5.00 to \$35.00 a year, recently said he would not object to that extortion except that it had been accompanied by a charge of \$97.00 extra for trackage. The greed of railroad officials seems to recognize no bounds and they do not hesitate to try to extort any amount the grain elevator operator will stand for.

Asked— Answered

[Readers who fail to find information desired on any subject of interest to grain dealers should send us their query for free publication here. The experience of your brother dealers is worth consulting. Replies to queries are solicited.]

Special Car Supply for Hot Corn?

Grain Dealers Journal: With regard to my suit against the railroad company for loss on two cars of corn due to delay in furnishing cars, as stated in this column Mar. 10, was there not an order issued at Washington in 1917 as a war measure superseding all other orders that grain on hand and in danger of heating was to be given preference over grain in the country to come in?—J. S. Cameron, Elliott, Ill.

Ans.: As the shipments on which the loss in question was suffered were made in November, 1917, the claim is governed by prior orders, and not by the numerous regulations put out in 1918 and 1919.

Some time after the Food Control Act was signed by the President Aug. 10, 1917, an order of the U. S. Food Administration went into effect, giving priority to wheat and rye, but about Dec. 1, 1917, the Food Administration made a request, not an order, of the railroads that the priority be extended to include other grains, so that wheat, corn, oats, rye and barley all were placed on the same basis. No preference was indicated in this order for corn going out of condition.

The Illinois Public Utilities Commission, however, as early as Mar. 22, 1917, ordered the railroad companies to make shelled corn a preferred class of freight, the principle being the same that should have controlled the supply of cars for corn going out of condition in November, 1917.

How to Recover for Grain Door Lumber.

Grain Dealers Journal: We have been furnishing lumber for grain doors, for which the railroad company refuses to pay. We would like some information on how to proceed to get this money.—Moser, Frisinger & Sons, Rockford, O.

Ans.: To recover the outlay certain steps should be taken before providing the lumber, as outlined by Attorney Owen L. Coon, in the following:

If you are compelled to buy grain door lumber to cooper grain cars when the supply of grain doors at your station is exhausted, you can recover back the money if you go at it just right. Do it just like this!

(1) Order a new supply of your local railroad agent well in advance of the old supply being exhausted.

(2) If the new supply does not arrive before the old supply is exhausted, then ask your local railroad agent in WRITING to buy such lumber for you from the local lumber yard. Ask him in writing to keep a copy of the request. You may need it later!

(3) In nine cases out of ten the local agent will not go and buy the lumber for you, but it is necessary that you ask him to do it first anyway. After he refuses or neglects to do it, then you go and buy the lumber you need from the local lumber yard yourself.

(4) Keep an accurate account of the number of feet used on each car in cooping it and the approximate cost of such lumber for each car.

(5) If the railroad agent will allow you to do it, write on the B/L before you tender it to him for his signature, the following: "Shipper furnished _____ feet of lumber for the cooping of this car."

(6) After you have received your new supply of grain doors, then make up the invoice against the railroad, showing the amount of lumber you supplied on each car and the amount it cost you. Attach to this claim against the railroad, the invoice from your local lumber yard showing the amount you paid, and the written request to the railroad agent to buy the lumber for you before you yourself did it. Then send this claim to your division superintendent—not to the freight claim department. Your division superintendent should then handle it as an operating expense. If you do as I have mentioned it above and if you keep after him hard enough and often enough—you will get your money back.

In some cases the railroad will send the

money to the lumber firm from whom you purchased the lumber and it will be necessary that you have them refund back to you the money which you formerly paid them for the lumber. This is often done by the railroads to comply with certain rules and regulations of the Interstate Commerce Commission. It however is merely a matter of form as you should be able to get the money back from your local lumber firm or have them turn the railroad voucher over to you.

Underwriters' Rules on Aerial Wiring to Cupola?

Grain Dealers Journal: We are going to put in a wireless to get the grain markets. Will the insurance company allow one end of the aerial to be fastened to the cupola of the elevator?—R. R. Meents & Sons, Clifton, Ill.

Ans.: The insurance companies do not object to aerials being fastened to the cupola, as there is no more hazard than running a telephone wire into the building; and the underwriters permit telephone wires to be attached to buildings. However, in order to cover this question, the grain and mill mutuals have drawn up a set of tentative specifications for the installation of radio equipment, which are published elsewhere in this number of the Journal.

Consignee's Liability for Freight Charges?

Grain Dealers Journal: Some time ago the Journal gave a court decision stating that the railroad companies could not hold consignees for undercharge in freight after the account had been closed. What was this case?—C. P. Blackburn & Co., Baltimore, Md.

Ans.: In *Pennsylvania Co. v. Townsend*, 100 Atl. Rep. 855, published in the *Grain Dealers Journal* for July 10, 1917, page 81, the Supreme Court of New Jersey held that the notify party was not the consignee and therefore was not liable, even though he took the goods and paid the charges first demanded. To hold the assignee of the B/L for an undercharge the assignee of the notify B/L must have knowledge at the time of paying the freight that it was an undercharge, the theory of the New Jersey court being that the railroad company is bound by its first bill of freight charges as far as the notify party is concerned, the carrier still having recourse against the consignor for the undercharge.

The foregoing is good law, and is not affected by the rule that the carrier has a right to collect from consignor or consignee, and neither is it affected by the new clause in the uniform B/L published in full on page 776 of the *Grain Dealers Journal* Dec. 10, 1921, and made effective Mar. 15, 1922, providing in sec. 7 that the consignor may protect himself against claim for undercharge by writing on the face of the B/L that carrier shall not make delivery without requiring payment of charges.

As nearly all grain is shipped under the S/O B/L the New Jersey Supreme Court decision above given controls, and it has not been reversed by the Supreme Court of the United States.

Of course this places the carrier in a bad position, as if it fails to demand the full charges when delivering to a notify party a shipment that the consignor has covered with the foregoing indorsement the carrier can recover neither from the shipper nor the notify party, and finally finds itself a violator of the Interstate Commerce Act requiring collection of full charges.

NEW YORK, N. Y.—The fact that the Federal inspection of corn at Western markets is grading poorly on arrival is causing general dissatisfaction, particularly in this market, and seems to prove conclusively that uniformity of inspection under the present system cannot be relied upon.—L. W. Forbell.

The Federal Trade Commission's jurisdiction is held closely to interstate and foreign commerce in the decision by the U. S. Circuit Court of Appeals in the case of the *Commission v. Norden Ship Supply Co.* just affirmed by the Supreme Court of the United States. The unfair practices alleged had no relation to the shipment of goods from other states into defendant's warehouses, but occurred after their arrival and in re-sale locally. The Supreme Court of the District of Columbia recently made permanent the injunction restraining the Commission from requiring the *Claire Furnace Co.* to make monthly reports.

Garnishment of Proceeds of Mortgaged Crop.

The Supreme Court of South Dakota has reversed itself in the case of *Bank of Brookings v. Aurora Grain Co.*

The mortgagor hauled in and delivered the grain to the defendant's elevator. The grain was sold, and thereafter, by consent of both mortgagor and mortgagee, the proceeds became substituted as security for the mortgage indebtedness. There is no evidence that defendant ever consented or agreed to dispose of or apply the money in any manner whatever. Defendant merely held it as substituted in place of the grain. The only duty assumed was that of bailee. The defendant never had or claimed any interest in the grain or proceeds thereof. After the sale the defendant's possession of the proceeds was with the consent and under the agreement of both mortgagor and mortgagee.

In its first decision the supreme court ruled that the creditors could not reach the fund by garnishment, holding that the claim of the trustee holding funds for the benefit of the mortgagees, was superior to that of a creditor of the mortgagor.

In its last decision, Jan. 30, 1922, after a rehearing, the supreme court held that:

Where a mortgagee of grain advised a grain company of its mortgage and directed it not to sell any grain delivered to it by the mortgagor, but to issue storage or sales tickets in the names of both mortgagor and mortgagee, and not to pay the mortgagor any money, if the grain company received and disposed of the grain in full recognition of the mortgagee's rights, it voluntarily assumed the relation of a trustee for the mortgagee of such portion of the proceeds as would pay the mortgage indebtedness.

A grain company receiving and disposing of mortgaged grain under circumstances making it a trustee for the mortgagee of such part of the proceeds as was needed to pay the indebtedness could not defend an action for conversion on the ground that it paid the proceeds to the mortgagor's trustee in bankruptcy under an order of the bankruptcy court, where if it had disclosed that it was holding part of the funds, as trustee for the mortgagee, no valid order for the delivery of such part could have issued, especially in view of Rev. Code 1919, § 49, providing that no one can take advantage of his own wrong.

It was the duty of one purchasing mortgaged grain who thereby became a trustee for the mortgagee of a part of the proceeds to disclose that fact in a summary proceeding brought against it in the bankruptcy court to compel delivery of the proceeds to the mortgagor's trustee in bankruptcy, or at least to turn the fund into court to the end that adverse claimants might have their rights adjudicated under Rev. Code 1919, § 2324.—186 N. W. Rep. 563.

Indiana Farmers Dealers Meet.

The annual convention of the Indiana Farmers Grain Dealers Ass'n was held at Wabash, Mar. 2 and 3, and the following officers were elected:

Pres., J. S. Minch, Chalmers; vice-presidents, C. E. Barracks, Frankton; M. P. Hill, Frances; treas., F. Glaspie, Oxford; sec'y, E. G. McCollum, Indianapolis. Directors: F. W. Moore, Otterbein; Frank Tippey, Marion; William Stephenson, Muncie; John Jackson, Centerville; Frank Glaspie, Oxford; H. E. Van Nuys, Monticello; James Mauck, Middletown.

Muncie and Marion extended invitations and requests for the next convention.

One of the resolutions adopted advocated the construction of the Great Lakes-St. Lawrence Deep Waterway.

The Farmers Elevator Managers Ass'n of Indiana was organized by the managers during the meeting. Only active managers of farmers elevators will be eligible for membership, and a membership fee of \$5 per year will be charged. The managers elected the following officers of their Ass'n:

Pres., H. H. Potter, Rensselaer; vice-pres., H. B. Fry, Winamac; sec'y-treas., E. C. Patty, Cutler. Directors: E. O. Williams, Laketon; H. H. Potter; H. B. Fry; Walter Penrod, Matthews; H. O. Rice, Huntington.

FROZEN FARM LOANS still load down the federal reserve system, says the Federal Reserve Board.

Carrier Liable for Flood Damage.

In March, 1913, plaintiff Ithaca Roller Mills shipped over the road of defendant Ann Arbor Railroad Co. 50 bags of beans of the value of \$264.56 to Ironton, Ohio; W. A. Murdock was the notify consignee. The Cincinnati, Hamilton & Dayton Railroad was the connecting carrier from Toledo to Ironton. The beans reached Ironton on March 24th, in reasonable season, and were unloaded in the freighthouse of the connecting carrier on the 25th. Mr. Murdock was not notified of their arrival.

Ironton is located on the Ohio river. It was visited by destructive floods in 1883, 1884 and 1907.

On the 24th of March, the day the shipment arrived, the river was running full. It commenced to rise the 25th and the rise continued during the succeeding days, culminating on Sunday, the 30th. The flood did much damage to the city. The shipment of beans was soaked with water; some of the beans were turned over to the relief committee, but were not usable, and the balance were thrown away.

On Saturday, the 29th, Mr. Murdock, the notify consignee, went to the freighthouse of the Detroit, Toledo & Ironton, in the same building as the freighthouse of the Cincinnati, Hamilton & Dayton, and removed to a boat he had procured about 100 tons of freight. He was unable to get into the Cincinnati, Hamilton & Dayton freighthouse because it was locked. It appears from the testimony of the freight agent of the connecting carrier that he left the freighthouse on Friday and did not return until Sunday. The water was not up to the freighthouse floor on Saturday. The following day, however, it was from 24 to 30 inches deep.

Plaintiff brought suit for damages in a justice court in 1913, and was awarded damages. The judgment was affirmed by the Circuit Court of Gratiot County and sustained by the Supreme Court of Michigan Feb. 8, 1922.

The Supreme Court said:

The lower court further found that as early as Wednesday telegrams and telephones were received from localities up stream telling of the flood, and that the mayor of Ironton issued repeated warnings that a destructive flood was approaching, and advising diligence for the safety of the people and their property, and that such warnings were given publicity through the press, and that the agents of the carrier had knowledge of the imminent danger, but took no steps to protect the property in its

freighthouse, but left the freighthouse locked up from Friday until Sunday. He concluded, as matter of law, that, although the flood was an act of God, it was not a defense where the carrier had notice of the impending flood and did not use reasonable means to protect the shipment from destruction, although it had ample time so to do.

We find no difficulty in agreeing that this disastrous flood was an act of God; nor do we find any difficulty in agreeing that the carrier is not liable when the loss is occasioned by the act of God or the public enemy. Our difficulty is reached when we come to the task of applying the law to the found facts. Was the loss occasioned by the act of God, or by the negligence of the defendant in failing to take reasonable precautions to protect the shipment from the flood after it had notice that it was imminent? The trial judge reached the conclusion that the latter was the cause of the loss, not the former, and concluded that the carrier was liable.

Where the carrier, as in the instant case, had warning of the oncoming flood, ample time after such warning to protect the shipment, and did not take reasonable precautions to protect the same after such notice, he is not exonerated from liability upon the principles laid down in the delay cases. The case was disposed of by the trial judge under the rule above quoted from the text-writers and courts. We have no disposition to alter or change this rule.

The judgment will be affirmed.—186 N. W. Rep. 516.

Report on Dust Explosion.

A report has been issued by the Canadian Fire Underwriters Ass'n on the grain dust explosion that occurred in Harbor Commissioners' Elevator No. 1, Montreal, Que., on Oct. 27, 1921, and which was illustrated and considered in detail on page 640 of the Journal for Nov. 10, 1921.

The following statements were made by the fire insurance investigators in their report:

The house was in operation and grain (corn) was in process of shipment to a steamer alongside the dock.

This report was written previous to any official investigation, but owing to the comparatively slight damage none of the evidence was destroyed, and consequently the path traveled by the blast was easily followed.

It is established beyond doubt that the explosion occurred in No. 10 lofting leg, and, presumably, was caused by an overheated bearing of the boot pulley which had to be taken out and rebabbitted.

The employee in attendance at this loft claimed that the first intimation he received of anything amiss was a red glare emanating from the elevator boot up through the sink grating. He immediately closed off the valve at the shipping spout and the next instant a sudden flash of flame shot up and severely burned his face and hands.

At this moment a door leading into the electric sub-station was blown open, and upon investigation the operator on duty decided that something was seriously amiss and with commendable promptitude pulled the primary switches controlling the whole of the machinery throughout the house.

The initial explosion which was apparently very mild, was immediately followed by the secondary blast which carried up the down leg of the loft where running through the interstitial space and exerted its force against the roof of the bin floor where it connected with the steel trunking of the remainder of the leg. It also communicated through the delivery spouting into two of the garner, and thence through the short spouting into No. 9 loft, having thereby traversed throughout the whole of the communicating enclosed spaces not cut off by valves.

Owing to the unprecedented amount of grain handled during the season the elevator was in a dirty condition. Apparently in this case it was not a factor in the propagation of the explosion. A large quantity of fine dust was afterwards in evidence lodged on the tops of the spouting, on beams and platforms, and on floors in the immediate vicinity of the blast.

New Chief Grain Inspector at Memphis.

The new chief grain inspector of the Memphis Merchants Exchange is not at all new to the work. M. B. Houseal, the new head of the department, has been connected with the office for 10 years. After doing clerical work for five years he was promoted to deputy inspector in December, 1916. Before entering this profession he was identified with the various railroads at Memphis.

His knowledge of grain inspection was gained by actual experience under the super-

vision of E. R. Gardner, who was chief inspector at Memphis for 24 years. He succeeded Mr. Gardner as chief Mar. 1 on the retirement of the latter to engage in the grain and hay business on his own account. A portrait of Mr. Houseal is given herewith.

Coming Conventions.

April 11, 12. Western Grain Dealers Ass'n at Des Moines, Ia.

April 19, 20. Missouri Grain Dealers Ass'n at St. Louis, Mo.

May 9. Panhandle Grain Dealers Ass'n at Amarillo, Tex.

May 9, 10. Illinois Grain Dealers' Ass'n at Peoria.

May 11, 12. Oklahoma Grain Dealers Ass'n at Oklahoma City.

May 16, 17, 18. Kansas Grain Dealers Ass'n at Wichita.

May 26, 27. Texas Grain Dealers Ass'n at Fort Worth.

May 29, 31. Southern Seedmen's Ass'n at New Orleans, La.

May 31, June 1, 2. Millers National Federation at Kansas City, Mo.

June 19, 20. Wholesale Grass Seed Dealers Ass'n at Chicago.

June 21, 22, 23. American Seed Trade Ass'n at Chicago.

July 25, 27. National Hay Ass'n at Cedar Point, O.

Acid Treatment of Hard Seeds.

The Cornell University Agricultural Experiment Station has recently issued a bulletin relating to the germination of hard seeds of the various leguminous plants in whose seed this condition of hardness or water impermeability is frequently found.

A method of treating such seed is outlined. The seed should be placed in a small vial or test tube, and over it should be poured a concentrated solution of sulphuric acid equal to about 5 or 6 times the volume of the seed. After stirring until all seeds are completely covered by the acid, the tube should stand for 15 to 45 minutes at ordinary room temperature. The longer time is required when the percentage of hard seed is high.

At the end of the time, water from a faucet should be run into the tube until it is nearly full, then the contents of the tube should be poured into a strainer and the seeds immediately washed with water. The washing should continue until the seed is entirely free from acid. Seeds so treated may be planted at once, or they may be allowed to dry. It is preferable to plant small lots immediately.

Leaking in Transit

Grain dealers can help brother sufferers in the collection of claims for loss by reporting to Grain Dealers Journal, for free publication, car initials, number, place, date and condition of car seen leaking grain in transit.

Recently we have received reports of the following leaking or bad order cars:

M. P. 34937 passed thru Taylorville, Ill., on the Wabash Feb. 25 with south door open. Car was loaded with corn.—L. T. Jones & Co., by L. T. Jones.

U. P. 124793 passed thru Brighton, Colo., Mar. 1, southbound, leaking corn thru a hole in the side of the car. Hole had been patched with a piece of tin. Train did not stop so could not fix or examine carefully.—The Brighton Farmers Co-op. Elev. Co.

T. P. & W. 8291 passed thru La Place, Ill., Feb. 15, east bound on C. I. & W., leaking yellow corn in a stream.—V. Hawthorne.

D. & S. L. 52102 passed thru Nickel, Ind., Feb. 8, leaking corn at door. Train moving rapidly so had no opportunity to repair.—Nickel Grain Co., Nickel (Valparaiso p. o.), Ind.



M. B. Houseal, Memphis, Tenn.,
Chief Grain Inspector.

Letters

[Here is the grain dealers' forum for the discussion of grain trade problems, practices and needed reforms. When you have anything to say of interest to members of the grain trade, send it to the Journal for publication. It may draw out the views of others.]

Steel Covered Elevators Will Not Be Struck by Lightning.

Grain Dealers Journal: We note your article on lightning losses, page No. 313, March 10th number.

In our twenty years' experience we have yet to learn of a fire loss by lightning when an elevator is completely sided with steel, roofed with steel and above all cornice covered with steel.

The matter of its being galvanized is merely for the life of the steel.

The steel siding should be grounded at each corner of the building.

We are not saying that lightning rod equipment is not a good investment. Please note, we say completely covered with steel.—Very truly, P. F. McAllister & Co., by P. F. McAllister, Bloomington, Ill.

Will Attempt to Stop Extortionate Ground Rentals in Illinois.

Editor, Grain Dealers Journal: At its meeting on March 2nd, the Illinois Commerce Commission, after giving due consideration to your complaint of the raise in rent by the railroads on the property occupied by various elevator concerns, passed the following resolution:

WHEREAS, Numerous complaints have been received by this Commission concerning rents charged lessees on the leasing or re-leasing of railroad property for elevators, service tracks, industrial tracks and other industrial purposes; now, therefore, be it

RESOLVED, That in conformity with the rulings of the Interstate Commerce Commission, the Illinois Commerce Commission require in cases involving approval by this Commission of leases or re-lease of railroad property for elevators, service tracks, industrial tracks or other industrial purposes where such re-lease of said property involves a changed consideration, adequate evidence of the value of the property of the railroad involved in the lease.

RESOLVED, further, That a copy of this resolution be served on each of the several railroads operating in Illinois as notice of the policy of this Commission.

This is intended to, and we believe will, prevent any extortion on the part of the railroad companies. The Commission desires to have this resolution sent to as many of the elevator concerns as it can reach.—Yours truly, Frank L. Smith, Chairman, Springfield, Ill.

Rapid Handling by Export Elevator.

Grain Dealers Journal: The grain trade will be pleased to learn of the rapid handling of grain by the Sunset Elevators operated by the J. Rosenbaum Grain Co. at Galveston, Texas. The elevator is of only 1,000,000 bus. capacity, has five legs and five 2,000 bushel scales, and two 36" boat shipping conveyors.

The Rosenbaum Company report the following one month's performance:

4424 cars received.

During the same month it delivered to ships 5,580,500 bus.

During this period the house had four single day performances as follows:

First day—112 cars in 9 hrs. 30 min.

Second day—96 cars in 8 hrs.

Third day—106 cars in 9 hrs.

Fourth day—208 cars in 20 hrs.

Bear in mind that the elevator also received on two receiving legs and eight receiving pits located on four tracks.

During this same period the following ships were loaded: S.S. "General Church" 357,000 bu.—10 hrs. 30 min., including trimming time; S.S. "Vincenzo Florio" 324,000 bu.—10 hrs. in-

cluding trimming; S.S. "Taxandria" 268,000 bu.—8 hrs. 45 min. including trimming.

I think this information will be of great interest to operators of many export elevators as well as exporters and grain men generally.—James Stewart & Company, W. R. Sinks, mgr.

Activity of County Agents.

Grain Dealers Journal: The pernicious activity of some county agents whose work has come to my knowledge would seem to indicate that these men have lost sight of the original purpose for which they were appointed, or else I am sadly mistaken. When a county agent was first talked of for our county the only work he was expected to carry on was that of helping farmers to better agricultural methods. It is but natural that men on farms should get into a rut and continue year after year trying to produce grains on soil not suited to the crop planted.

At the start all of our local merchants were quite enthusiastic about the new county agent, but the last two years he has not given much time to helping the farmers to better production. His entire time seems to be devoted to shipping in car-loads of merchandise and in trying to find an interior market for such products as the neighboring farmers are willing to entrust to his care. One car-load he shipped out last October has not yet been paid for, and the sufferers are somewhat sore on the county agent.

Needless to say, no more contributions are tendered by the local merchants and the expenses are growing so rapidly, we doubt the farmers will long continue to contribute, because the expenses of county agent's maintenance greatly overshadows the imaginary benefits derived.—G. E. Stone.

Galveston Asks Higher Rate on Grain to New Orleans.

Grain Dealers Journal: The Galveston Commercial Ass'n is attacking rates on various commodities, including grain and grain products, from points in Kansas, south of the U. P., for export, where the rate to New Orleans has been published on same basis as the export rate applying to Galveston.

In the complaint, the Galveston Commercial Ass'n asks that the I. C. C. establish rates to New Orleans 5c per hundred higher than the export rate through Galveston. As we understand it, compliance with the complainant's request, will be detrimental to the interest of southern Kansas shippers as it will force all southern Kansas shippers to use the port of Galveston exclusively and prevent their shipping export traffic via New Orleans. As far as we know, all of the carriers are willing to maintain the same rate to both ports except the Santa Fe and Katy lines.

Should the I. C. C. grant the prayer of the Galveston Commercial Exchange and authorize a 5c per hundred differential, in favor of Galveston, all shippers south of the main line of the U. P. in Kansas will be forced to ship all export grain through that port. Galveston does not have elevator facilities for handling the business and with one exception, all of the elevators located at Galveston are obsolete, having been built a number of years. Further, the modern elevator in Galveston is controlled by private interests, while New Orleans has a modern two million and a half bushel state owned plant, operated for the benefit of the public.

Galveston has been blockaded during the free movement of grain practically every year since 1914, and as a result many shippers have sustained material loss on account of their inability to secure equipment for shipment of grain to that port. I am not unmindful of conditions prevailing at Galveston during the latter part of 1921, and know that many shippers sustained material loss on account of grain getting out of condition, because the elevators were unable to unload promptly after arrival.

We have asked permission to file an intervening petition and will appear before the examiner for the commission in person at the hearing Monday, 27th, in Galveston. In order that we may do our part, to defeat the Galveston plan, we must show the Commission that Galveston cannot, and has not, taken care of the business offered.—E. J. Smiley, Topeka, Kan.

Minnesota Farmers Elevator Ass'n to Split?

The election of John Gustafson as pres. of the Minnesota Farmers Grain Dealers Ass'n is taken by some observers to mean that a split cannot now be avoided in that organization. Mr. Gustafson, referred to as the "U. S. G. G. candidate," opposed Charles Kenning, the past pres., and Mr. Kenning has been decidedly opposed to the plans of the U. S. G. G.

Mr. Gustafson received 30 votes to Mr. Kenning's 21.

Hearing on "Old Tonnage" at Kansas City.

An examiner for the Interstate Commerce Commission will hold a hearing at Kansas City Mar. 30 on the request of shippers at Kansas City and Omaha that certain grain in store be moved under the new freight rates rather than the old. The grain in question was placed in store before the January freight rate reduction became effective and it is the desire of the owners to forward it under the reduced rates.

A preliminary meeting of elevator operators to prepare for the hearing was held at Kansas City recently, it being attended by several men from Omaha as well as members of the Kansas City trade.

GEORGE MARCY, pres. of the Armour Grain Co., who is now in California, said Mar. 23 that he is entirely optimistic over the grain business for 1922. He predicted bumper crops, good markets and the probable maintenance of prices. The rule, he said, has never failed that a big grain crop means the return of prosperity. He added that it will be at least 3 years before Russia may be expected to harvest even a fair crop.

Exports of Grain Weekly.

[From Atlantic and Gulf Ports, in Bus., 000 Omitted.]

	Wheat.		Corn.		Oats.	
	1921.	1920.	1921.	1920.	1921.	1920.
July	2... 5,586	6,851	1,848	56	1,084	26
July	9... 5,981	5,771	2,817	35	1,154	800
July	16... 5,807	8,556	3,016	89	1,159	322
July	23... 5,359	8,990	3,132	157	908	1,006
July	30... 7,015	7,033	3,192	43	1,895	867
Aug.	6... 10,355	6,375	2,897	52	2,068	353
Aug.	13... 7,777	7,220	1,787	102	511	9
Aug.	20... 9,682	6,919	2,254	63	800	46
Aug.	27... 12,628	11,253	2,839	122	499	166
Sept.	3... 8,690	6,425	1,469	9	184	52
Sept.	10... 10,609	8,203	2,223	55	338	130
Sept.	17... 8,200	10,902	3,981	67	390	50
Sept.	24... 7,515	10,572	3,341	76	125	119
Oct.	1... 8,186	7,476	3,025	75	255	112
Oct.	8... 7,895	7,427	2,302	297	163	186
Oct.	15... 5,210	9,345	2,925	323	99	226
Oct.	22... 7,782	7,985	1,999	401	67	368
Oct.	29... 7,849	8,189	1,136	212	80	275
Nov.	5... 4,944	7,768	1,790	463	217	238
Nov.	12... 6,291	6,072	1,513	474	228	475
Nov.	19... 5,907	8,113	2,145	1,061	439	466
Nov.	26... 4,153	7,983	1,624	170	612	185
Dec.	3... 7,420	8,009	2,108	466	565	180
Dec.	10... 5,748	7,256	1,172	209	270	21
Dec.	17... 6,018	7,924	2,424	231	608	85
Dec.	24... 6,267	6,510	2,253	250	588	124
Dec.	31... 4,685	9,509	1,176	144	561	34
Jan.	7... 5,484	9,429	3,008	504	341	249
Jan.	14... 5,747	6,457	2,651	264	430	185
Jan.	21... 5,455	4,782	3,363	1,029	602	139
Jan.	28... 3,473	6,257	5,937	1,130	465	237
Feb.	4... 3,215	8,814	4,712	1,476	237	195
Feb.	11... 2,499	5,131	4,770	1,240	313	150
Feb.	18... 3,803	4,776	4,851	1,155	370	312
Feb.	25... 4,731	3,968	5,058	1,518	650	125
Mar.	4... 5,484	5,469	6,351	3,153	348	209
Mar.	11... 3,349	4,390	5,365	2,182	741	68
Mar.	18... 4,630	4,847	4,312	2,720	864	289

Total since
July 1... 240,929 278,961 112,766 22,073 21,233 9,079

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

ILLINOIS.

Shabbona, Ill., Mar. 15.—Grain movement at a standstill as roads are impassable.—Oscar Berga.

Okawville, Ill., Mar. 21.—Not over 10% of wheat left among farmers.—Okawville Farmers Elvtr. Co.

Chestnut, Ill., Mar. 18.—About half of corn has moved.—W. Schaffenacher, mgr. Mt. Pulaski Grain Co.

Springfield, Ill., Mar. 15.—Corn reserves on farms range rather uneven but are about the average for the state for this time of year and mostly in strong hands. Movement has fallen off due to the recent break in prices and unfavorable roads.—A. J. Surratt, agricultural statistician.

Agnew (Galt p. o.), Ill., Mar. 18.—Grain movement from farms slow, partly because of bad roads, and those who did not need the money by Mar. 1 probably will hold their grain until midsummer. Corn of good quality, all grading No. 3 and some No. 2. Oats average about 27½ lbs.—Agnew Farmers Elvtr. Co.

INDIANA.

Jolietville, Ind., Mar. 22.—Considerable corn in farmers hands, being held for better price.—Goodrich Bros. Hay & Grain Co.

Bunker Hill, Ind., Mar. 18.—Corn not moving account bad roads and low prices. Expect a good movement later.—Bunker Hill Elvtr. Co.

LOUISIANA.

New Orleans, La., Mar. 15.—Exports of grain thru this port during February were as follows: Wheat, 937,343 bus.; corn, 4,648,694 bus.; oats, 27,820 bus.; barley, 71,383 bus.; and rye, 17,142 bus.; compared with wheat, 4,974,017 bus.; corn, 1,735,750 bus.; oats, 24,775 bus.; barley, 468,723 bus.; and rye, 87,858 bus. in February, 1921.—Geo. S. Colby, chief grain inspector and weighmaster.

OHIO.

Collins, O., Mar. 16.—Very little grain held.—Clark Pelton, mgr. Collins Farmers Elvtr. Co.

SOUTH DAKOTA.

Wasta, S. D., Mar. 12.—Little wheat to be marketed. Have shipped in considerable corn and oats, which farmers are buying as fast as they can get the money and as the weather permits hauling.—Lars J. Nesheim.

The Price of Corn and Middlemen.

There are a number of farmers who luxuriate in the belief that there is always a world hunger for their product at a price representing cost of production. They believe that there is no such thing as an "over supply." They are not concerned about the varying size of crops, but labor under the impression that a 3,000,000,000 bushel corn crop should sell for as much as a 2,500,000,000 bushel corn crop.

These people have a simple, childish faith that if it were not for the speculators, the bankers, the grain dealers, et al., that corn would now be selling for at least cost of production. They will not admit that the fault is to some extent in themselves, but think to find it in the credit and distributing system.

Faulty as our present credit and distributing system is, it nevertheless handles grain more economically than any other system which has ever been perfected. The most perfect system in the world will not permit farmers to produce far more than the market wants at a price representing cost of production.—Wallace's Farmer.

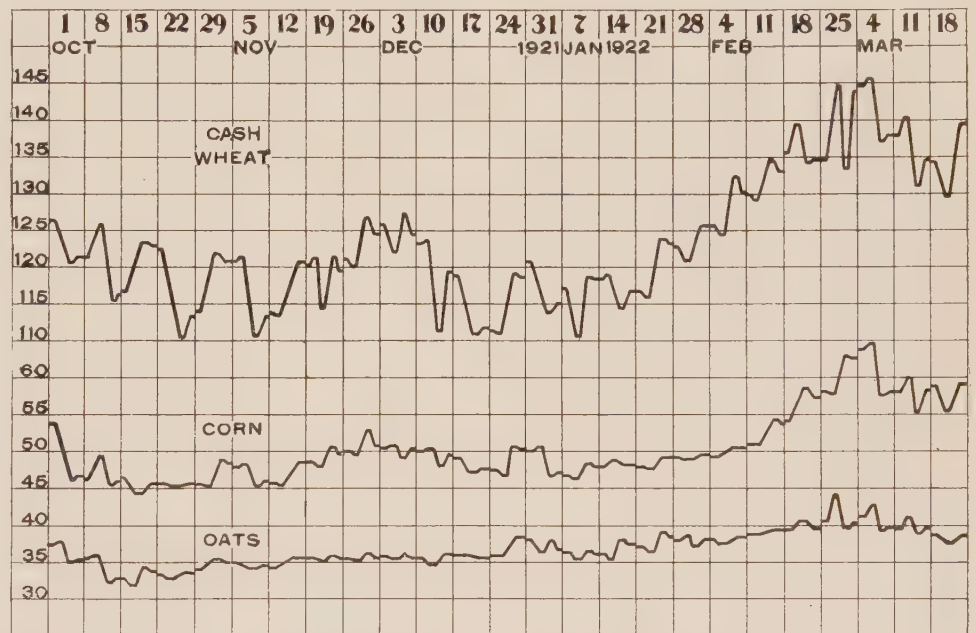
Leaking Cars Decreasing.

The agitation for better coöperation and the more extensive use of car liners as well as the effort of some railroads to provide better cars has no doubt helped to reduce the number of grain laden cars arriving at the various terminals in a leaking condition. The reports of cars found leaking upon arrival in Chicago shows marked improvement. Shippers should find much encouragement in the following record of cars reported leaking upon arrival at Chicago, as these figures were compiled by the Chicago Board of Trade Weighing Department which makes an earnest effort to record every car leaking grain upon arrival.

1917,	19,721	cars.	or	16.3%	leaking.
1918,	28,678	cars.	or	16.2%	leaking.
1919,	24,365	cars.	or	15.2%	leaking.
1920,	18,478	cars.	or	18.5%	leaking.
1921,	18,729	cars.	or	10.7%	leaking.

Cash Wheat, Corn and Oats Fluctuations from Sept. 26 to Mar. 18.

Opening, high, low and closing average prices of No. 2 red winter wheat, No. 2 mixed corn and No. 2 white oats at Chicago each week are given on the chart herewith. The daily average is used in charting; actual prices were made each week a few cents above or below the extreme charted.



Daily Closing Prices.

The daily closing prices of wheat, corn, oats, rye and barley for May delivery at the following markets for the past two weeks have been as follows:

MAY WHEAT.

	Mar. 10	Mar. 11	Mar. 13	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 20	Mar. 21	Mar. 22	Mar. 23	Mar. 24
Chicago	136½	137½	132¼	133½	132¼	135½	138½	139½	138½	134½	136½	132	132½
Kansas City	125¼	125¼	120¼	122	120	123¼	126	126	126¼	122½	124¼	120	120¼
St. Louis	132¼	132½	128	129¾	128½	131¼	134¼	135	135¼	131½	132½	128¾	129¼
Minneapolis	141	140½	137½	138½	137½	140¼	144¼	145½	145	141¼	142½	139½	140¼
Duluth (durum)	123¼	122½	120¼	120½	119	121½	125	125½	124½	120½	122	119	120¾
Winnipeg	135½	136	133¼	133¼	132	135¼	138½	139½	137½	135½	137½	135	134¾
Toledo	145	145½	141	142	.....	147	147½	146¾	143	145	139¾	140¾	140¾
Milwaukee	137	137½	132½	134	132½	135½	138½	139½	138½	134½	136½	132	132½

MAY CORN.

	Mar. 10	Mar. 11	Mar. 13	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 20	Mar. 21	Mar. 22	Mar. 23	Mar. 24
Chicago	61½	59½	61¼	62¾	62	61½	60¾	61½	60¾	61½	59¼	59¼	59¼
Kansas City	56¼	56¾	54¾	55½	53½	55¼	56½	56	55¾	54½	55¼	53½	53½
St. Louis	60½	61¼	59	58½	58	59½	60¾	60¾	60¾	58¾	59½	58½	58½
Milwaukee	62½	63½	60¾	61	59½	61¼	62½	62	61¾	60¾	61½	59¾	59¾

MAY OATS.

	Mar. 10	Mar. 11	Mar. 13	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 20	Mar. 21	Mar. 22	Mar. 23	Mar. 24
Chicago	39¼	39¾	38¼	38½	37¾	38½	38½	38½	37¾	38	36¾	37	37
Kansas City	36¾	36¾	35¾	35¾	34¾	35¾	35¾	35¾	34¾	35	33¾	34	34
St. Louis	39½	39¾	39	39	38¼	38¾	39½	39½	39½	39	37½	37½	37½
Minneapolis	33¾	34¾	32¾	33	32¼	32¾	33¾	33¾	33¾	32¾	31¾	31¾	31¾
Winnipeg	47¾	49	48	48	47¼	48¾	49¾	49¾	48¾	48½	47¾	47¾	47¾
Milwaukee	39¼	39½	38¾	38¾	37¾	38¼	39	38¾	38¾	37¾	38	36¾	37

MAY RYE.

	Mar. 10	Mar. 11	Mar. 13	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 20	Mar. 21	Mar. 22	Mar. 23	Mar. 24
Chicago	106½	107	104	102¾	101¾	104¾	106¾	107½	106½	104½	105¾	102¼	102¾
Minneapolis	97	96¾	94½	93¾	92¼	94½	97	97	96¾	94½	94¾	92¾	92¾
Duluth	102½	103	100	98¾	99	100½	102¾	102¼	101½	99½	100¾	98	98¾
Winnipeg	106	106¾	105	104	102¼	104¾	106¼	105¾	105¾	103½	104¼	102	102

MAY BARLEY.

	Mar. 10	Mar. 11	Mar. 13	Mar. 14	Mar. 15	Mar. 16	Mar. 17	Mar. 18	Mar. 20	Mar. 21	Mar. 22	Mar. 23	Mar. 24
Chicago	65½	65½	65½	64	63	63	64	64	66½	66½	66	.....	66
Minneapolis	56	56	54¾	53¼	53¼	54¾	57¼	57¼	57	56¾	57½	57¾	57¼
Winnipeg	66¼	66¾	64½	65½	64¾	65¾	66¾	66¾	66¾	65¾	66¾	66	66

Wheat Stocks in Country Elevators and Mills.

On Mar. 17, the U. S. Dep't of Agriculture issued an estimate of the quantity of wheat in country elevators and mills on Mar. 1. The total, 72,564,000 bus., is the smallest in the past ten years, with the exception of Mar. 1, 1918. It amounts to only 9% of the 1921 crop.

Details by states follow:

	1918.	1919.	1920.	1921.	1922.
	*Bus.	*Bus.	*Bus.	*Bus.	*Bus.
N. Y.	617	706	585	1,122	883
Pa.	3,183	3,577	2,988	2,270	2,337
Md.	803	454	627	1,220	684
Va.	2,184	2,520	1,403	1,226	905
Ohio	3,703	4,790	5,820	2,130	2,870
Ind.	2,340	4,448	3,758	1,997	2,298
Ill.	2,160	4,478	4,912	2,730	3,619
Mich.	1,234	868	2,044	1,384	1,196
Wis.	852	1,849	1,060	464	231
Minn.	6,193	15,158	5,002	2,535	2,220
Iowa	668	2,338	1,700	429	808
Mo.	2,607	3,721	6,772	3,012	2,860
N. D.	6,160	12,681	10,044	9,629	7,326
S. D.	4,480	10,567	3,815	1,884	2,000
Neb.	826	3,297	5,461	2,419	2,634
Kan.	1,818	5,100	17,630	7,154	6,692
Ky.	720	2,426	1,835	540	805
Tenn.	368	900	892	282	378
Texas	486	630	7,232	1,029	1,124
Okl.	1,070	1,645	5,284	2,704	2,224
Mont.	2,874	6,591	1,681	4,877	4,310
Wash.	5,844	4,670	13,404	14,999	8,527
All other	14,948	13,623	19,284	21,039	15,633
U. S.	66,138	107,037	123,233	87,075	72,564

*In thousands (i. e., 000 omitted).

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds, as well as on the movement to country markets, are always welcome.

CANADA.

Ottawa, Ont.—The Dominion Bureau of Statistics has issued its final report on field crops for 1921. Wheat production was 300,858,100 bus., compared with 263,189,300 bus. in 1920; oats, 426,232,900 bus., compared with 530,709,700 bus. in 1920; barley, 59,709,100 bus., compared with 63,310,550 bus. in 1920; rye, 21,455,260 bus., compared with 11,306,400 bus. in 1920; buckwheat, 8,230,100 bus., compared with 8,994,700 bus. in 1920; and corn for husking, 14,904,000 bus., compared with 14,334,800 bus. in 1920.—Canadian Trade Commissioner, New York.

ILLINOIS.

Elvaston, Ill., Mar. 13.—Wheat acreage about the same as last year; plenty of moisture and in fine condition. Oats seeding not started. Corn and oats acreage will be about the same as last year.—W. E. Gabel.

Springfield, Ill., Mar. 22.—Good rains were general past week, but there was a deficiency of sunshine. No oats have been sown because of wet fields. Winter wheat is growing and in good condition, but some of the fields are inundated.—Clarence J. Root, meteorologist.

Springfield, Ill., Mar. 15.—Winter wheat indicates spotted damage from freezing and thawing, but the heavier wheat belt thru the central and southern areas of the state has had beneficial rains and the condition generally continues favorable. Rye is in favorable condition quite generally.—A. J. Surratt, agricultural statistician.

INDIANA.

Bunker Hill, Ind., Mar. 18.—Wheat looks 80% good at this time.—Bunker Hill Elvtr. Co.

Kendallville, Ind., Mar. 22.—Present outlook very bright.—F. M. Clark, gen'l mgr. City Milling Co.

Jolietville, Ind., Mar. 22.—Too early to tell much about wheat. No snow, much thawing and freezing. Acreage about 70% of normal.—Goodrich Bros. Hay & Grain Co.

IOWA.

Malvern, Ia., Mar. 19.—Recent rains have put winter wheat in good condition.—A. P. Kilmarlin.

Holstein, Ia., Mar. 3.—Lots of snow, roads are almost impassable. No field work will be done in March as is usually the case.—Allen Joslin.

KANSAS.

Clifton, Kan., Mar. 10.—The moisture Kansas received in the past 3 weeks will in time make quite a change in winter wheat prospects. I

have examined several fields this week that I had previously examined in December, and find them in much better condition. Wheat that was brown has taken on a green appearance. Seed that was unsprouted has sprouted since recent rains and is ready to come thru the ground. A few days of warm weather will bring all this up. Found only a very small percentage of seeds that had rotted so I believe the stand will be sufficient to produce a fair crop of wheat if conditions are favorable in the future.—M. L. Gear, Federal Grain Co., Kansas City.

MICHIGAN.

Lansing, Mich., Mar. 15.—The stocks of leading grains on the farms on Mar. 1 are somewhat above the average for the same date in past years, but less than they were one year ago except in the case of corn. The corn and wheat crops harvested last year were about equal to those of the previous year, but the production of oats and barley was much less. Of these four crops, wheat is the only one classed as a strictly cash crop in Michigan. When the yield of oats is normal or above, some eastern and southeastern counties market a portion of the crop. With this exception, very few localities produce any appreciable quantity of corn, oats or barley for shipment.—Michigan Crop Reporting Service.

MISSOURI.

Jefferson City, Mo., Mar. 18.—Crop acreages in 1922 will be about the same in Missouri as last year. Corn will show the same acreage, with some shifting in different localities. Oats acreage will likely be less. Very few oats sown, but farmers quite generally ready to seed.—Missouri Crop Reporting Service.

MONTANA.

Billings, Mont., Mar. 11.—Prospects good for crop on bench lands.—McCormick of Montana, Inc.

NEBRASKA.

Bellwood, Neb., Mar. 18.—Growing wheat in good condition. Had a rain, followed by snow, so we have plenty of moisture.—J. G. Schwartz.

OHIO.

Collins, O., Mar. 16.—Wheat looking fine.—Clark Pelton, mgr. Collins Farmers Elvtr. Co.

OKLAHOMA.

Ingersoll, Okla., Mar. 16.—We had good rains in this part of northwestern Oklahoma, but it came too late to save the wheat that was not up and that which was thin. Do not believe there will be a 50% crop in Alfalfa, Woods, Harper, Beaver, Texas and Cimarron counties.—W. E. Titus.

TEXAS.

Huntoon, Tex., Mar. 9.—Not much prospect for wheat here. Having quite a snow today.—Huntoon Equity Union Exchange, O. A. Cook.

Wichita Falls, Tex., Mar. 16.—On Mar. 8 we sent out a large number of inquiries to the trade in the Southwest, asking questions regarding wheat condition. The territory included is that running west to Childress, Tex., south to Stamford, Tex., east to Henrietta, Okla., the North Plains (west, north and east of Amarillo), and the South Plains (south of Amarillo). Com-

pilation of the returns show that percentages of the sown acreages ranging from 30% to 67% will be abandoned; and that, with most favorable conditions until harvest, the percentage of an average crop that will be produced range from 23% to 52%. None of the replies were received later than the 13th, and the whole territory has been visited with snow and rain since that time, and this should give a good start to the wheat that is not dead. The latter condition was somewhat anticipated in the question which considered most favorable conditions until harvest time.—Wichita Mill & Elvtr. Co., by H. L. Stover, mgr. grain dep't.

Firing the Kilns With Corn.

By F. L. CLARK.

The Adel Clay Products Co., Adel, Iowa, has been burning corn all winter in its kilns with surprisingly successful results. The manager writes, they have found it equivalent to the highest grade of eastern coal and the cost has been but little more.

The use of corn as fuel for the kilns has started as much discussion in agricultural Iowa almost as did Secretary Wallace in his statement on the use of surplus corn as domestic fuel. The press has taken up the story and is commenting upon it extensively. The Adel Co. insist in answering the adverse criticisms that it is not economically wrong to burn corn at this time, on the contrary that it is a relief measure to the hard pressed farmer.

"No one ever protested on economic grounds," says H. R. Straight of the Company, "against the consumption of millions of bushels of corn annually in the distilleries. Industrial alcohol is still made from corn and a great deal of this alcohol is burned for various purposes. If industrial alcohol made from corn were burned in a tractor instead of gasoline, surely no one would say it was wrong."

"When the farmer can save handling and hauling to market and the hauling of coal home, keep his money in his own community and help to relieve the bankrupt situation, it seems to me that it is right to do so. Since every one in Iowa is directly dependent on the farmer, it seems quite evident that anything that any of us can do to decrease the excessive supply of corn will mean money in all of our pockets in the long run."

"No one ever severely criticizes the farmer for wasting a good percentage of corn fed to hogs on the bare ground instead of on a masonry platform where it is all saved. Who ever heard of telling the farmer that he was doing an economic wrong by feeding his stock in a cold barn or without adequate shelter and thereby wasting a good part of his feed? Why don't those who think it is a sin to burn corn, go after the rats which eat enough corn that if burned would heat hundreds of homes."

"Corn was a war material and the over supply is a direct result of the war," Mr. Straight believes. "Let us use it up," he says, "to the best advantage so that the new crop which will shortly be coming on, can be in demand at a price which will help to raise us out of the financial chaos."

It Snowed in Kansas.

L. M. Hicks, traveling representative of the Root Grain Co., is one authority for the statement that it snowed in Kansas a few weeks ago; and to prove his statements he submits the photograph which is reproduced herewith. The incident occurred near Larned, and the car seems to be pretty effectually snowbound.

If some of the snow that fell stayed on the fields and did not all drift into the roads the beautiful blockade should cause several cases of heart failure in the ranks of the Crop Killers Union.

A BULLETIN giving the results of cultural experiments with grain sorghums in the Texas panhandle has recently been issued by the U. S. Dep't of Agriculture. One deduction is that the source of seed, altho it may be planted in a locality other than that where it was grown, has little or no effect on the crop and yield.



What a Kansas Snow Storm Did to L. M. Hicks, Traveling Kansas in Search for Signs of Drouth.

Radiographs

The radiophone continues its march of progress, and, in the grain trade, it gives promise of supplanting the older and more cumbersome methods of transmitting information quickly to a great number of widely separated points.

On page 319 of the Mar. 10th number of the Journal it was stated that Chicago, Kansas City and Omaha had already instituted service of broadcasting the market quotations of their respective grain exchanges. Other markets are rapidly falling into line, it having been demonstrated that quotations by radiophone can be received satisfactorily by grain dealers at considerable distances from the markets; and inquiries are being received daily from grain merchants and grain elevator operators who want to take advantage of this newest method of long distance communication.

It is true, of course, that some difficulties must yet be overcome; but in the light of the great strides that have been made in such a short time nothing that remains to be done can alter the fact that the transmission of market quotations and information by radiophone will soon become an established practice, taking its place alongside those other achievements that were dreams only a few months or years ago.

The Chicago Board of Trade has added the quotations for provisions to its service, which also now includes livestock quotations, carlot arrivals of grain and estimates of livestock receipts.

Flashes.

ELLSWORTH, KAN.—A local elevator will install radio receiving apparatus.

Two grain dealers of Omaha have organized a Company to handle radio equipment.

HUGOTON, KAN.—The Hugoton Equity Exchange has purchased and will install a radio receiving set.

CHEROKEE, OKLA.—The Bowersock Mill & Power Co. will install radio equipment in its elevator.

FULTON, ILL.—B. H. McFadden & Sons will soon move their office to a new location, and radio receiving equipment will be installed.

COMPLETE equipment for receiving radiophone market quotations from all the principal markets will be installed by the Wichita Board of Trade.

A PHILADELPHIA builder recently published an item in a newspaper there to the effect that the \$1,000,000 of houses he is building will be wired for radiophone service.

THE WAVE LENGTH used in broadcasting quotations of the Kansas City Board of Trade has been changed from 375 meters to 485 meters to raise the messages above interference from other sending stations.

WILLIAM MURPHY, chairman of the radiophone com'ite of the Kansas City Board of Trade, made a trip to Washington to confer with officials there on matters pertaining to the broadcasting of market information.

GRAIN DEALERS who have radio equipment should advise the officials of the exchanges from which they are accustomed to receive quotations whether the service is satisfactory. A little co-operation of this kind will do much to iron out all difficulties in a very short time.

TRAFFIC LAWS for the government of radio users have been drawn up by the Central Illinois Radio Club. In brief, the rules would forbid indiscriminate "sending" between certain hours, while market information, concerts, etc., are being broadcasted.

THE RADIOPHONE is being used in some localities to supplement the telephone. So far as the persons holding the conversation are concerned, it is no different from ordinary telephone service, but the message is transmitted part of the distance by wires in the usual manner, bridging gaps in the wire line via the ether.

Tell Us Your Experience.

If you experience any difficulty in getting the markets clearly tell us your trouble and we will try to help you.

Radio Privacy May Come Next.

John J. McCarty, vice-pres. of the American Telephone & Telegraph Co., announced on Mar. 20 that a device is practically perfected to guide radio waves directly to their destination, thus limiting radio conversations to the persons concerned.

Offers His Help.

Grain Dealers Journal: I have a radio receiving set and as I understand numerous grain dealers are interested in this subject I will be glad to give my experience along the line to anyone who desires it.

I feel sure that it will only be a year or two before every up-to-date elevator will be equipped with a receiving set. Contrary to popular opinion, it does not take an expert to handle a set. In fact, my twelve year old son is able to work my set as well, or better, than I myself.—W. C. Wharton, Leeds, N. D.

How to Install Radio Apparatus in Elevators.

The radiophone having become, almost overnight, the accepted means for receiving market quotations, it has been made apparent to insurance companies specializing in grain elevator business that they must evolve and promulgate rules for the safe installation of the apparatus to avoid an increase in the fire hazard of individual plants where the equipment is to be used.

It is a new subject, and as yet it has not been possible to provide more than tentative rules. A set of installation rules, now being used by the Grain Dealers Fire Ins. Co., and published in a recent number of *Our Paper*, follows:

The principal danger is from lightning and high voltage from accidental contact with lightning or power wires. The precautions taken are, therefore designed to prevent damage and fire by lightning from these causes.

1. The pole or tower as the case may be must be thoroughly grounded by not less than No. 4 wire, carried by the eaves and down the corner of the building. The ground shall be made as shown in the drawing reproduced herewith. In case the antenna is fastened to the building without pole or tower, the span fastened to the building shall be grounded. The pole or tower shall be treated exactly as a lightning rod.

2. The lead-in wire shall not be less than No. 10 for mechanical strength and shall drop from the antenna directly and unsupported to the point of entrance with attachment to the building by an approved insulator.

3. The antenna, supports and connections must be so installed that there is no chance for accidental contact with light or power wiring.

4. At the point where the lead-in wires are attached to and enter the building, there shall be installed an approved 750 volt lightning arrester with not to exceed 1/32" gap or other approved substantial lightning protection with no greater gap. The ground side of the gap to be grounded as described below.

5. Immediately inside the point of entrance, there shall be a switch which will ground the apparatus when closed. This switch shall be of a rating not less than 100 amp.-600 volts, with standard non-combustible base and shall be closed at all times when the apparatus is not in use.

6. The wires to the building shall enter through non-combustible insulators designed for the purpose and the wiring inside shall be installed in a manner approved for wiring for lighting equipment. No wire less than No. 14

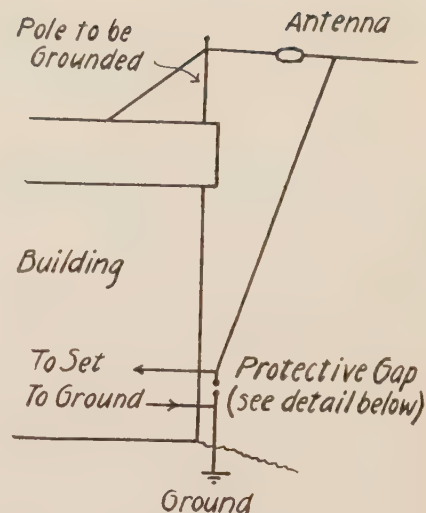


Fig. 1

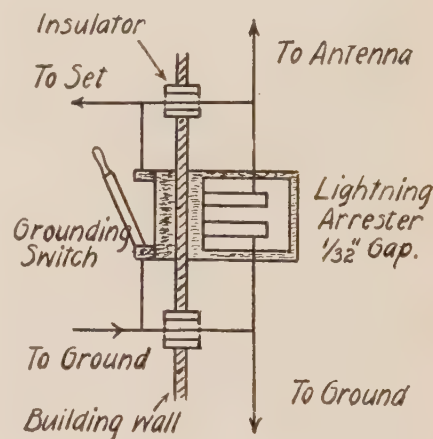


Fig. 2

Instructions for Installing Radiophone in Grain Elevator.

rubber covered wire shall be used for connecting to the receiving set.

7. Grounding. The best ground is to fasten the ground wire to a buried water pipe. This must be done in a substantial manner if the connection is to be permanent. A good connection is essential both for the protection and operation of the equipment. The ground can best be made by sweating the wire into a plug screwed into the pipe or fittings.

If such water pipe is not available, the wire should be sweated into a grounding cap screwed to the top of a 1" galvanized pipe driven into the ground to moist earth but not less than eight feet. Another way is to plug the pipe about 3" below the top, insert the wire and pour the pipe full of solder after the pipe and wire have been cleaned and tinned.

The ground wire shall not be less than No. 10 copper wire and shall be protected from mechanical injury. It must be insulated from the building.

A STUDY of the inheritance of resistance to infection of stinking smut of wheat, in the United States, is reported in a recent Review of the International Institute of Agriculture, Rome. Some of the conclusions drawn are that different varieties of wheat possess different kinds of resistance, and the linkage between resistance and morphological characteristics is not sufficient to prevent the selection of a resistant strain of any morphological type desired.

Annual Meeting of U. S. G. G., Inc., Discloses a Split

Opening with each of its members carrying a chip upon his shoulder; continuing thru bickering, log rolling and wire pulling that would have done credit to a political convention the palmist days of petty politics; and closing in turmoil, the first delegate convention of the U. S. Grain Growers, Inc., was held in Chicago Mar. 21-24.

The events of that convention marked an additional step in the development of a situation that ultimately will result, if, indeed, it has not already resulted, in the end of one of the most ambitious and evanescent dreams of the theorists. Always unsound economically, and lacking the possibility of achieving real success because of that unsoundness, the U. S. Grain Growers, Inc., has proven itself also to be wholly devoid of homogeneity, that attribute which is all-essential to any agency that aspires to leadership in its field. It may continue to exist after a fashion, and it is possible that it will come to occupy a place as one of the minor units in the grain marketing machinery of the country; but as an organization that might revolutionize and completely make over the system of marketing grain it is dead.

If the 50,000-odd farmers who have signed grower contracts with the U. S. Grain Growers, Inc., could have been present in that delegate convention they would first have been utterly disgusted with themselves for having become a part of the organization. After this feeling of disgust had passed, its place would have been taken by one of anger at the display of political play-acting prompted by the personal and factional ambitions that were contending on that convention floor and in the com'te rooms. It was such an unsightly showing of the organization's lack of a true spirit of mutual helpfulness that the blindest observer could not have failed to wonder that it would dare aspire to a position of dominance in the business of handling grain.

Sessions of the convention were held on the 19th floor of the Mallers Building, one of the newest of the city's down-town office structures. The U. S. Grain Growers, Inc., has the entire 19th floor under lease, and as only a portion of the space is used for the ordinary purposes of the business this left ample room for the meeting.

The first session was devoted largely to hearing reports of the officers.

Report of Auditor.

The auditor's report showed that on Dec. 31, 1921, the corporation held notes given by farmers in payment of their \$10 membership fees totaling about \$107,000; that post dated checks totaling \$1,300 and given for the same purpose were so held; and that some \$3,700 in assets was represented by checks that had been rejected when presented for payment to the banks upon which they were drawn. The latter item, the auditor said, it is expected can be recovered when the corporation sells grain for the individuals who signed the checks and thus becomes possessed of some of their money.

It was also shown by the auditor's report that a total of \$210,700 had been borrowed by the U. S. Grain Growers, Inc., from individuals, banks, farm bureaus, and other sources. A reserve of some \$37,500 had been set up for payment of these notes.

The deficit as of Dec. 31 was reported as \$137,245. Altho it was not so stated, it is to be inferred that on Dec. 31 the amount remaining to be paid by the corporation was represented by the deficit of \$137,245, plus the loans of \$210,700 (making about \$347,945), and less the reserve of \$37,500 together with any other minor assets there may have been.

After a time, W. G. Eckhardt, treas., and head of the organization dep't, made his report.

This was entirely too long to be given in detail, and many portions of it could only be obtained from documents and tabulations that were shown and explained by the speaker.

In brief, the report showed that at one accounting period the excess of expenses over income was \$102,524.62. Amounts borrowed were apparently counted as income. Included in the items of expense were the following:

Some of the Expenses.	
Organization department.....	\$351,282.27
Information department.....	83,057.75
Finance department.....	23,433.81
Legal department.....	30,352.39
General administration.....	35,772.65
Secretary's department.....	13,327.28
Directors.....	13,763.43
Executive com'te.....	7,528.80

A balance sheet at the end of one period indicated approximately the following liabilities:

Notes payable.....	\$226,000.00
Accounts payable.....	76,474.58
Interest accrued.....	10,066.92

In the detailed report of organization work, it was shown that Illinois, Indiana, Iowa, Missouri and Nebraska had yielded more money than the work in those states had cost, while Colorado, Kansas, Minnesota, North Dakota, Oklahoma and South Dakota had yielded less. Grouping the former class of states as "gains" and the latter as "losses," the tabulation showed:

Gains.	
Illinois.....	\$ 9,831.27
Indiana.....	12,791.46
Iowa.....	6,087.55
Missouri.....	8,984.98
Nebraska.....	9,562.90

Losses.	
Colorado.....	\$ 1,155.54
Kansas.....	6,128.11
Minnesota.....	5,930.07
North Dakota.....	13,780.68
Oklahoma.....	7,382.37
South Dakota.....	2,534.21

A table showing the cost of obtaining each member in each of the 11 states in which organization work has been done showed the following:

Cost to Obtain Members.	
Colorado.....	\$ 8.55
Illinois.....	7.12
Indiana.....	4.77
Iowa.....	6.58
Kansas.....	14.59
Minnesota.....	7.70
Missouri.....	6.37
Nebraska.....	5.55
North Dakota.....	6.39
Oklahoma.....	10.22
South Dakota.....	13.11

Figures showing the average cost of each member for the whole country were not given out, but even in the case of Indiana, the state making the most favorable showing, only \$5.23 would remain from each \$10 fee; while in Kansas there was an actual loss of \$4.59 per member.

A statement distributed by Mr. Eckhardt gave an exhibit of the corporation's cash situation as at the close of business Mar. 21, the previous day. He explained that a similar exhibit is placed before the officers each business day.

This cash exhibit showed the following facts:

Disbursements.	
Total cash receipts.....	\$626,008.71
Total cash disbursements.....	619,486.00
Farmers' Finance Corp. check held.....	12,009.00
Net cash disbursements.....	607,486.00
Unpaid organization expense.....	67,848.35
Unpaid office salaries.....	4,112.24
Other accounts payable.....	6,118.24
Cash on hand (actual).....	18,522.71

The breach between two factions of the delegates was disclosed, and the real fight came, when the body first touched a matter having a bearing on the election of directors. This means that a desire to control was uppermost when the question was reached "Who shall conduct the business of the corporation and guide its destiny during the immediate future?"

A rules com'te had been appointed earlier, and this com'te was instructed to retire and to prepare for submission to the convention rules prescribing the mode of procedure for the election of directors.

The com'te retired about mid-afternoon Wednesday. At 10 p. m. Wednesday it had not reported, but it was evident that some word had been sent to those in authority in the convention, as Pres. Gustafson suggested that a com'te of 11 (one man from each state) be appointed to attempt to "harmonize" the contending forces. The com'te of 11 was appointed.

Attempt at Harmony Failed.

About 1 p. m., Thursday—24 hours after the rules com'te had started its deliberations—the "harmony" com'te reported that it was unable to agree. It could not "harmonize."

Two reports were then submitted for the com'te on rules. One was a majority report and the other a minority report. Oceans of oratory were spilled by adherents of the minority faction, the principal claim being that adoption of the majority program would be tantamount to "taxation without representation," and that it would deprive a large portion of the membership of a voice in the control of the organization.

The Vote.

When the vote finally came it upheld the majority or "administration" program by 22,844 to 18,941 with 5 votes absent. (Each delegate cast a number of votes equivalent to the number of members in his district on Jan. 17, 1922.)

The close vote, about 54% in support of "administration" policies and 46% against, indicates that the issue was closely drawn, and that the "antiadministration" adherents were not a mere handful who were contending stubbornly just because they were stubborn. And this fact is of special import because it shows that the issue is too sharply drawn to yield to palliative measures.

It would be impossible to give all the speeches that were made before the vote was taken on the motion which marked the first clear cut issue between the contending factions. Nor would it be particularly informative to give those speeches except as they might reach some farmers who should know what the speakers had in mind as they talked.

Mr. Gregory, an Illinois delegate, said that it was no secret, he thought, that the majority had a slate of 21 men for directors who could in no sense be said to represent Illinois, Kansas, Oklahoma and North Dakota, whose delegates composed, in part, the minority. He likened the control of the convention to a political situation that might exist in the "first ward of Chicago," and warned that some future convention might be similarly controlled by still another group of states. He cited that some day Pennsylvania and Virginia may be in the seat of power, able to enforce their individual desires upon the real grain growing states.

A Mr. Jones, of Oklahoma, said that it appeared to him there may be some truth in the statement that farmers do not have sense enough to run their own business.

Another man said the trouble revolved about what he alleged to be an attempt to disregard the vote of 4 states.

When Will Grain Be Handled?

Robert N. Clark, of Stronghurst, Ill., one of the old board of directors and the man who has been in charge of organization work in Illinois, spoke at length and he touched principally on the unreadiness of the corporation to handle grain. He said that he has told Illinois farmers that the U. S. Grain Growers, Inc., would handle the 1922 crops, and he declared that if the officers feared to tell the delegates what plans had been made to handle grain he himself did not fear to tell it.

He then asserted that a plan for handling grain was ready 3 weeks after the October meeting of the board of directors, but that it was "held in readiness to be sprung at an op-

portune moment," and that it was "sprung" on the board in January, 1922. This plan, as he outlined it, contemplated the formation of the agency now known as the U. S. Grain Growers Sales Co., a corporation to have \$250,000 capital stock and to be so constituted that its plan will circumvent the rules of the exchanges which are alleged to bar co-operative organizations. He outlined the steps that will be necessary to put the plan into operation and to make the Sales Company ready to function, and asked the delegates to figure how long it would take to do all the work. His thought appeared to be that it would be impossible to handle much, if any, of the 1922 crops, in Illinois at any rate.

Immediately after Mr. Clark finished, Pres. Gustafson announced that the plan for handling grain would be explained to the delegates whenever they desired to hear it. Clifford Thorne, the corporation's legal counsel, who had been present at practically all sessions, and who was consulted frequently on questions that arose, was called upon to do the explaining.

Mr. Thorne told of the steps that had been taken toward incorporation and toward obtaining admission to certain states, but he made no definite announcement as to an exact date when the Sales Company may be expected to begin selling grain.

Some resolutions that were introduced dealt with commonplace matters, and this piqued many delegates because they felt there was important work to do and that it should be taken care of promptly. One resolution recited advocacy of a reduction in freight rates; another asserted it to be the sense of the convention that the national grain sales plan of farmers should be built as far as possible upon existing farmers' elevators and farmer controlled agencies in terminal markets; and still another endorsed the movement for the construction of the Great Lakes-St. Lawrence Waterway.

A special resolution was introduced under the auspices of North Dakota delegates. It was not commonplace. It recited that it has been proven by experience that a national grain selling organization cannot successfully and satisfactorily handle matters within a state and requested that North Dakota be made a separate unit with individual state authority on all matters of organization and similar questions that relate to conditions within the state.

Afterward it was said that the North Dakota resolution was practically a withdrawal of that state from the U. S. Grain Growers, Inc., altho such action was not definitely taken.

The election of directors resulted in the choice of the following men:

Directors Elected.

J. T. Belk, Henry, S. D.; A. G. Burgeson, Douglas, N. D.; Robert N. Clark, Stronghurst, Ill.; R. A. Cowles, Bloomington, Ill.; W. R. Crowther, Golden City, Mo.; P. E. Donnell, Waco, Mo.; T. I. Ferris, Pleasant Lake, Ind.; C. R. Finley, Illinois; C. H. Gustafson, Lincoln, Neb.; W. B. Jessee, Supply, Okla.; H. L. Keefe, Walthill, Neb.; H. C. Lau, Tracey, Minn.; A. J. McGinnis; James K. Mason, Milton, Ind.; A. L. Middleton, Eagle Grove, Ia.; F. A. Mudge, Peru, Ill.; Frank M. Myers, Fort Dodge, Ia.; J. D. Pancake, Loveland, Colo.; F. O. Peterson, Kansas; Robert Peterson, Bloomington, Ill.; Chas. B. Steward, Red Cloud, Minn.

Later, 6 of the newly elected directors from the minority side refused to serve because the wishes of the delegates from the various states had been ignored, "depriving the growers of said districts from being represented as the by-laws provide." The statement notifying of this action was signed by Robert N. Clarke, Illinois; Robert A. Cowles, Illinois; Robert Peterson, Illinois; A. J. McGinnis, N. D.; A. G. Burgeson, N. D.; and Charles R. Finley.

The new board of directors went into session immediately after the convention adjourned. It was understood that, perhaps among other matters, the North Dakota resolution would be considered. This had been referred to the board.

Minority Meets Separately.

Many of the minority delegates held a meeting after adjournment of the delegate convention, and this meeting was continued Saturday. One action of this minority meeting was to give out a statement substantially as follows:

The decision of the minority delegates from Illinois, North Dakota, Kansas, Oklahoma, Texas, Minnesota and Michigan, representing 46% of the voting strength of the delegate convention of the U. S. Grain Growers, Inc., is that they will assure the members they represent they are determined to market grain co-operatively at the earliest possible moment. This will be done thru the sales agency of the U. S. Grain Growers, Inc., if possible.

If it is found impossible to restore the U. S. Grain Growers, Inc., to the democratic control of its membership these states will take immediate steps to create other marketing agencies.

The feeling of the minority delegates is that no co-operative enterprise can succeed under caucus rules, and that the unfair action at the recent election of the board of directors must be fully corrected if the U. S. Grain Growers, Inc., is to succeed.

Saturday morning, Robert N. Clark telegraphed all the men who have been soliciting memberships and contract signatures in Illinois that, as more grain is under contract in the state than it seems possible to handle by July 1 organization work is being discontinued in Illinois until sales agencies are opened at the principal markets.

When the antiadministration delegates met about 11 a. m. Saturday Mr. Clark told them of this action. Before leaving Chicago, these minority delegates made provisions for a com'te to take any necessary action that may arise in the controversy with the new board of directors.

The Cooperative Union Elevator Must Be Refinanced.

The Cooperative Union Elevator Co. which took over the old Union Elevator at Cleveland did not sell enough stock to pay for the house, so additional funds must be raised to buy the plant originally contracted for at \$168,000. As the operators lost \$40,000 last year the sellers of the house have agreed to reduce their price to \$130,000.

The Ohio Farmer for March 25 says

A decided step forward in statewide co-operative grain marketing plans was taken on March 15 when 150 presidents and secretaries of Farm Bureaus, stockholders of the Co-operative Union Elevator of Cleveland and representatives of the Grange gathered in Fostoria.

An agreement was reached with the stockholders of the Co-operative Union Elevator Company whereby the state grain marketing committee of nine, representing the Ohio Farm Bureau Federation, the Ohio State Grange and the Ohio Farmers' Grain Dealers' Ass'n will get back of the plan to sell \$200,000 worth of stock, \$75,000 worth of which, it is expected, will be subscribed within two weeks.

The step was brought about thru losses amounting to \$40,000 sustained by the Co-operative Union Elevator Co. Reflecting that losses have been experienced by many of the well-established business organizations during the period of depression, the stockholders, far from feeling discouraged, voted unanimously to re-finance the company.

Losses Absorbed by Sellers.

The optimism of the stockholders was still further strengthened by the announcement that the Union Elevator Co., from which the plant of the Co-operative Union Elevator had been bought, was willing to absorb the losses by reducing the purchase price of the plant from \$168,000 to \$120,000. When the co-operative company took over the plant it was agreed that \$75,000 should have been paid in. Inasmuch as this amount has not been put up the actual transfer has not taken place. Disinterested appraisers have recently revalued the plant at \$155,000.

The resolution authorizing the stock-selling campaign provides: "The sale of \$200,000 dollars worth of stock of the company at par, upon condition that unless \$75,000 is subscribed all subscriptions shall be returned to the subscribers, together with any sums paid thereon, and all money so paid thereon shall be held in a trust fund under control of the Ohio Grain Marketing Committee of Nine of the Ohio Farm Bureau Federation, the Ohio State Grange and the Ohio Farmers' Grain Dealers' Ass'n, and not mingled with the funds of the company.

The Iowa Meeting.

The Annual Convention of the Western Grain Dealers Ass'n will be held April 11-12, 1922. Headquarters Hotel Fort Des Moines, Des Moines, Ia.

TUESDAY—10:30 A. M.

President's Address, Lee Davis, Scranton, Iowa.

Secretary-Treasurer's Report, Geo. A. Wells, Des Moines, Iowa.

Report of Western Grain Dealers' Mutual Fire Insurance Company, Jay A. King, President, Des Moines, Iowa.

TUESDAY—12:00 NOON.

Buffet Lunch, provided by Des Moines Board of Trade.

TUESDAY—1:30 P. M.

Addresses of Welcome, L. W. Ainsworth, Secretary Des Moines Board of Trade.

Ed. O'Dea, Chairman Council of Members, Des Moines Chamber of Commerce.

Iowa Post-War Grain Rate Relations, E. G. Wylie, Traffic Commissioner Greater Des Moines Committee.

Legal Status of Iowa—Post-War Grain Rates, Hon. J. H. Henderson, Commerce Counsel, State of Iowa.

A Study of the Metric System of Weights, H. A. Foss, Board of Trade Weighmaster, Chicago.

Railroad Claims, Owen L. Coon, Railroad Claim Attorney, Chicago.

WEDNESDAY—9:30 A. M.

Grain Inspection and the Shippers' Duties Relating Thereto, E. L. Morris, Division Supervisor, Kansas City.

Elevator Construction, A. C. Rynders, President National Elevator Builders Ass'n, Wichita, Kans.

Electric Power, Installation and Equipment, H. E. Johnson, District Sales Manager, Century Electric Co., Des Moines.

Radio Installation and Operation, L. W. Ainsworth, Secretary Des Moines Board of Trade.

ENTERTAINMENT.

Community singing led by the Western Grain Dealers' Association Glee Club.

TUESDAY—7:30 P. M.

Great Lakes-St. Lawrence Waterway, Jos. F. Leopold, Secretary Greater Iowa Committee, Des Moines.

Smoker and Vaudeville provided by Des Moines Board of Trade, Des Moines Chamber of Commerce.

The Expensive County Agents.

County agents are expensive luxuries. Nebraska farmers have been asking to secure the discharge of some county agents who insisted upon spending money so freely as to strain the tax paying ability of property owners in some counties. Many of these county agents seem to be receiving far more income from their so-called efforts to help the farmers to better agricultural methods, than all the grain dealers receive for marketing their grain.

The income of these county agitators is so large, the wonder is all the grain dealers of the county have not been persistent applicants for the position of county agent. If you wonder why the farmers are hesitating to contribute more, note the lump sum expenses in the following:

REPORT OF COUNTY AGENT AND FARM BUREAU OF CLAYTON CO., IOWA.

For the year ending Dec. 31, 1921.

Receipts.

Government allowance	\$ 600.00
County Appro.	5,000.00
Membership Fees	7,831.45
Sale Receipts	2,050.00
Other Receipts	1,255.00

Total

Cash on hand Dec. 31, 1920.....

Grand Total

Expenditures.

Total Salaries, Co. Agent and Stenographer	\$4,988.00
Traveling Expenses	1,023.77
Office Expense	3,157.65
Specialist Expense	1,286.13
Farm Bureau	2,370.00
Club Premium	287.25
Notes Paid	120.00
Miscellaneous Expense (not itemized)	542.19

Total

Balance on hand Jan. 1, 1922.....

Fire Hazards of Internal Combustion Engines.

[From an Address by E. C. Hach Before the Field Men's Ass'n.]

The hazards from internal combustion engines may properly be divided into two general classes:

1. Inherent hazards from the engines themselves which are largely determined by their construction and installation and which are not under the direct control of the operator.

2. Handling of the fuel and care of the equipment.

The latter is under the direct control of the operator, and as such, the human element enters in and consequently this hazard is of primary importance. Our regulations governing the installation of engines were promulgated to guard against these hazards and the construction and installation has been fairly well standardized; but the fuel is handled by the operator and careless handling of fuel has probably been responsible for more fires than the inherent hazard of the engine itself. That particular point should, therefore, be carefully investigated by the inspector.

We will discuss first, inherent hazards common to all types of engines, and then take up hazards of certain types of engines.

Exhaust Pot Hazard.—All types of internal combustion engines present the hot exhaust pot or exhaust pipe hazard. Exhaust temperatures will vary from 300 deg. to about 1400 deg. F. Iron becomes red hot at about 1000 deg. F. It is plain to be seen that combustible material should be kept clear of an exhaust pot or exhaust pipe. The inspector should see that no oily rags are left lying around for they are very liable to spontaneous combustion, especially where there is a source of heat to stimulate the chemical action that results in spontaneous combustion. Several fires have come to our attention recently that were caused by combustible material having been set on fire by an exhaust pot, and in these cases the combustible material was about 2 ft. from the exhaust pot. Our regulations at the present time require a clear space of 1 ft., but it is always well to have more if it can just as well be had. Where an exhaust pipe passes thru a combustible wall it should have a clear space equal to at least 1½ times the diameter of the exhaust pipe and a ventulating thimble should be provided.

Burning Out of Exhaust Pipe.—Another quite frequent occurrence which presents a very serious hazard is the burning out of the exhaust pot or pipe. This is perhaps more common to the engines which burn the lower grades of fuel than to engines burning gasoline. When the lower grades of fuel are burned they sometimes crack and the excess carbon may be burned or it may not, but more frequently not, unless the engine is running on very light load and has a great excess of air in the cylinder. This carbon will deposit in the exhaust pot or pipe and eventually burns out. For this reason a stack should never extend thru the roof. There is invariably chaff or dust on the roof and a hot flake of carbon would start a fire very easily.

Failure of Ignition.—It also happens sometimes that a mixture is not ignited and passes out of the cylinder unburned. If this happens when the engine is being started and ignition falls several times in succession, a considerable quantity of combustible mixture will accumulate in the exhaust pot or pipe or in the exhaust pit if one is used and then when the engine does start and hot gases are exhausted they may set fire to the unburned gases.

If the passage to the atmosphere is at all restricted by elbows, long pipes, etc., the pressure due to the combustion of these unburned gases may rise to a point which will blow up the container in which the explosion takes place.

Occasionally a fuel pipe will leak or break off at a joint, due to the crystallization of the metal caused by the constant vibration of the engine. The inspector should examine the suspension of these pipes and see that there is no place where a pipe may be fastened to something rigid such as a wall, at a point very close to where it is fastened to the engine so that the vibration of the engine will bring a stress on the joints. The carburetion engine is more hazardous than any other type. Back firing thru the carburetor and into the room is a very serious hazard.

Kerosene carburetion engines are usually started on gasoline and when they are warmed up they are switched over to kerosene. This is accomplished in a number of different ways which are safe, but occasionally an operator will remove the spark plugs and "prime" the engine by squirting a little gasoline into the combustion chamber. In doing so he may squirt gasoline on the outside of the engine and thus introduce a hazard. Even that method is too slow for some and they warm up by burning gasoline on the outside of the cylinder or build a fire under it. Such a practice is, of course, inexcusable. In such cases the inspector should either convince the operator of the error or relieve his company of liability.

One very objectionable feature to the semi-diesel engine is that it is necessary to heat the hot bulb before starting. This is usually done with a gasoline torch and therein lies the danger. The bulb itself is usually protected by a

cap and though there is still some element of danger, even when so protected, it is not regarded as serious. The hazard is in the handling of the torch and since that is handled by the operator he is the man to talk to. Ask him what precaution he uses. Discuss the subject with him and impress him with the necessity of carefully handling it.

The hazard in connection with the handling of fuel depends upon the kind of installation. If tanks and piping are installed according to our specifications for a pump feed arrangement, practically the only thing that can present a hazard is the breakage of pipes. Even a gravity feed arrangement for compression ignited engines is safe if it is installed strictly according to our specifications. Gravity feed for electrically ignited engines is not permitted. Electrically ignited engines are carburetion engines and in gravity feed arrangements the carburetor is equipped with a float so that the fuel is automatically shut off when the carburetor contains a certain quantity. This float may fail in its operation and thus permit the entire contents of the feed tank to flow into the room. Since this type of engine burns either gasoline or kerosene, such a condition would be very serious. A compression ignited engine, however, does not have a carburetor and, therefore, such a condition is not possible. The only thing that could happen in the latter case is the breakage of a fuel pipe, and since our specifications for a gravity feed arrangement require fuel pipes to be enclosed in larger pipes that will drain to a trench or conduit which in turn will drain to a pit located outside the building, this hazard is also eliminated.

Engines that are not installed according to our specifications may present a hazard. If the tanks are filled by hand in the building, fuel will invariably be spilled on the floor and therein lies the hazard. This is the hazard of the tank in the base, and where the engine is located in a dirty place the hazard is sufficient to warrant declining to recommend the risk.

When storage tanks are located above ground or underground and not as deep as required by our specifications, a direct connection between the storage tank and feed tank is not permitted. If there were a direct connection, and the valve between the storage tank and feed tank were accidentally left open after filling the feed tank, the level of the fuel in the storage tank may be high enough to cause the fuel to feed by gravity past the feed tank and into the engine room. This may not be a hazard at the time the valve is left open and when the operator sees that the engine will operate with that valve open he may leave it open at all times to save him the trouble of filling the small tank so often. Eventually the pipes may leak or break and then this condition becomes a hazard.

A RESOLUTION was adopted by the senate Mar. 15 extending for 25 years the time for payment of the \$50,000,000 grain debt of Austria.

The Canadian Situation.

A political and legislative situation is developing in the Dominion of Canada that may have far reaching effects in the Dominion Parliament, which has recently convened at Ottawa; and which may result in an upheaval that will materially alter domestic affairs in the government of our neighbor to the north.

In the national elections, held a few months ago, the Liberal, Conservative and Progressive parties contended for control of Parliament. The vote resulted in giving the Liberal party about twice as many votes as the Conservatives and the Progressives in the Parliament; but conditions are such that the Progressives may be said to hold the balance of power, with ability at any moment to turn out the existing government and to make new national elections necessary.

The Progressive party is largely controlled by farmers of the prairie provinces, and their program includes a demand for the construction of the Hudson's Bay railway, the establishment of lower freight rates and a tariff suitable to them, and the re-establishment of the Wheat Board.

The re-establishment of the Wheat Board means government control of the marketing of wheat, and while there is no agreement on the exact form of control that is desired, it was said by D. M. Fredricksen, of Canora, Saskatchewan, when he addressed the recent convention of the U. S. Grain Growers, Inc., in Chicago that the Progressives want the government to finance the marketing of grain in some way for the 1922 crops, and that the condition of affairs is such that undoubtedly they will get what they want.

Respiration of Shelled Corn.

A chemical action in the nature of very slow combustion goes on in shelled corn by the union of the oxygen of the air with the carbon in the corn to form carbon dioxide gas. The heat is generated so slowly that ordinarily it is conducted away or diffused so as not to become noticeable. "The actual change of temperature depends not alone upon the rate of respiration of the grain, but upon the size and shape of the bulk, the insulation afforded by the material of which the container or bin is constructed, the temperature of the surrounding medium (usually air), and the initial temperature of the grain itself," says Professor C. H. Bailey of the division of agricultural biochemistry of the University of Minnesota in Technical Bulletin No. 3, from which the following is taken.

In bulk grain the factor of significance, however, is the total quantity of heat energy released per unit of time, and since the reactions which give rise to carbon dioxide are exothermic, it is not of vital importance to determine whether the heat energy is released as the result of respiration within the tissues of the kernel, or in respiration or other exothermic reactions on the surface of the grain. In either event the heat energy becomes distributed throughout the bulk of grain and serves to raise its temperature if not immediately dissipated into the surrounding medium.

Shelled corn, like many other materials, is hygroscopic, and loses moisture to the atmosphere or gains moisture from it until the humidity of the latter is in equilibrium with the hygroscopic moisture of the grain. No data were found in the literature concerning the moisture content of shelled corn when in equilibrium with atmospheres of different relative humidity.

During the curing of husked ear corn the percentage of moisture is appreciably higher in the cob than in the grain during the early stages, but the cob loses moisture at a more rapid rate than the kernels, and as the cob approaches dryness (9 per cent of moisture) the kernels contain more moisture than the cob.

Hygroscopic moisture in shelled corn in equilibrium with atmospheres of different relative humidity at 25° C. varies in different samples of corn. Sweet corn which was used contained a lower percentage of hygroscopic moisture throughout the entire range of humidity studied, and varied from about 7.8 per cent moisture at 35 per cent relative humidity to about 16.5 per cent moisture at 85 per cent relative humidity. White dent corn contained about 8.7 per cent moisture at 35 per cent relative humidity. White dent corn contained moisture at 85 per cent relative humidity, or about one per cent of moisture more than sweet corn throughout the entire range of humidities studied. A sample of white dent corn of the 1919 crop was approximately intermediate between the sweet corn and the dent corn of the 1920 crop.

Distribution of moisture between the germ and the degerminated residue of corn kernel varied with the moisture content. At higher percentages of moisture the germ contains more moisture than the endosperm, the ratio at maximum imbibition being about 1.5 to 1. At about 18 per cent of moisture both structures contain the same percentage, while as the moisture content of the kernel is further reduced the germ contains less moisture than the residue.

Moisture content in large measure determines the rate of respiration of sound corn stored under uniform temperature and other conditions, as evidenced by the data secured from the study of representative corn varieties grown from Texas to North Dakota. Northern grown corn respired somewhat more vigorously than southern grown corn. Acceleration of respiration with increasing moisture content becomes marked when the moisture exceeds 13 per cent, and increases about 400 per cent between 15 and 17 per cent of moisture.

During the curing of corn on the cob immediately after harvest, the rate of respiration is lower for a time than that of corn of the same moisture content later in the season. Possibly a form of dormancy is involved, resulting from a reduced rate of diffusion of oxygen into the respiring cells, or of carbon dioxide therefrom, or both. This condition is of significance in that the probability of heating is diminished during the period immediately after harvest when the moisture content of the grain is usually high.

Cracked and broken corn kernels respire more vigorously than sound, normal kernels, as was shown by comparing the rate of respiration of mixtures containing varying percentages of such material. A somewhat increased risk is accordingly involved in storing and transporting corn containing appreciable quantities of broken grain.

Sprouted kernels when dried until they contain percentages of moisture usual to commercial corn have a higher rate of respiration than sound, ungerminated kernels of the same variety and moisture content. Heat damaged, and sour and heating corn also respire more vigorously than sound corn containing the same percentage of moisture. It appears that conditions such as heating or germination which for a time accelerate respiration, leave the grain with a higher respiratory "tone," even after the accelerating influence is removed by cooling and drying. Such grain accordingly presents a greater hazard in commercial handling and storage than sound grain of the same moisture content.

WHEAT consumption in France is declining slightly, now averaging 650,000 tons a month. The import needs of the present crop year are estimated at 600,000 tons, of which 300,000 tons are yet to be purchased. French farmers are under no pressure to sell their grain, and the carryover will be unusually large because of the unfavorable outlook for the next harvest. Wheat rich in gluten is desired for blending, and American flour is not wanted.

Peoria Complains of Lack of Uniformity in Inspection of Corn.

The present crop of corn contains more than the usual amount of damaged grain and the inspectors at many markets were caught unawares and let the corn go thru without grading it down as a strict interpretation of the federal inspection rules required. The result was a lack of uniformity that was soon detected by the shippers of corn from one inspection point to another, as well as by the federal supervision.

The Chicago officials of the federal supervision will hold a conference at Peoria, Ill., Mar. 29, with the receivers who have complained bitterly of the rigid grading at their market.

To the Sec'y of Agriculture the following letter was addressed by the pres. and sec'y and the inspection com'te of the Peoria Board of Trade:

FORMAL COMPLAINT TO SEC'Y OF AGRICULTURE.

PEORIA BOARD OF TRADE.

Peoria, Illinois.

March 18, 1922.

Hon. Henry C. Wallace,
Secretary of Agriculture,
Washington, D. C.

Dear Sir:

In connection with the inspection of grain in Peoria, we respectfully call your attention to the following facts:

I. There is an utter lack of uniformity between Peoria inspection and inspection in other markets. We have evidence sufficient to prove that the United States grain supervisor in Peoria has adhered to a more rigid interpretation of the United States inspection standards than has been followed in other markets. For example, during the past few months, one of our Peoria shippers rebilled approximately eight hundred cars from Peoria to other markets. On a large percentage of these shipments on the identical grain in same cars the inspection has been raised from one to two grades, while in the case of only four or five cars has the grade been lowered.

II. Previous complaints have been of no avail. The Peoria Board of Trade called the attention of your department to the variation in the grading of the new crop of corn as between Peoria and Chicago, immediately after the beginning of the movement. The chairman of the Board of Review at Chicago, Mr. Phillips, addressed the members of the Peoria Board of Trade on Oct. 29, 1921, and explained why the variation existed, but assured us that it had been remedied, because the Chicago inspection department was then counting the damage in the new corn, altho they had not done so during

the early movement. Mr. Phillips also stated that the Peoria department was 99% perfect while the Chicago department was 65% perfect. These two standards are approximately still being maintained. Either we must be put on the same basis with the other markets, or they must maintain the same standard of efficiency as that of Peoria.

III. This condition has brought great losses to the Producer. In view of the fact that there are large differences in price between the various grades of grain, the producer has felt the effect of the Peoria Federal Inspector's interpretation of the United States Inspection Standards in the form of lower prices.

IV. Dissatisfaction has arisen among the shippers and Peoria has been injured. Peoria inspection of the 1921 crop (especially corn) has brought scores of bitter protests from country shippers who reside in the great grain producing area tributary to Peoria. Shippers are now avoiding the Peoria market and declare they prefer to sell to other markets for lower prices than to risk the inspection at Peoria. Consequently, Peoria's reputation as a market is being ruined.

V. So serious is the situation that the members of the Peoria Board of Trade called for an open meeting. After unanimous disapproval of the Peoria Federal Grain Supervisor's interpretation of the United States Inspection Standards had been expressed, a resolution was passed calling upon the Secretary of Agriculture to intervene and bring about a correlation in the results of grain inspection in the various markets, and save the Peoria market from destruction.

We are requesting Mr. R. T. Miles of Chicago, in charge of general field headquarters, to come to Peoria and make an investigation. The evidence accumulated by our inspection committee will, at that time, be presented to him.

The situation should be corrected immediately and we earnestly solicit your co-operation and assistance.

THAT YELLOW CORN contains some element necessary to proper growth that is not found in white corn is said to have been demonstrated by recent experiments at the Nebraska Agricultural Experiment Station. One lot of rats was fed yellow corn, and another white, each lot getting in addition other feeds to complete a balanced ration. The rats fed white corn made poor growth and finally stopped growing altogether, while some died of starvation. Those receiving the yellow corn made normal growth and at the end of the period weighed twice as much as the surviving rats of the lot receiving white corn.

Reorganization at Milwaukee.

A general merchandising business in grain, both export and domestic, has been inaugurated by the Froedtert Malting Co., of Milwaukee, Wis., coincident with its change of name to Froedtert Grain & Malting Co. and the addition to its forces of J. W. Rice, manager of the grain department, and J. P. Hessburg, manager of the consignment department, whose portraits are given herewith.

J. Walter Rice was in charge of the cash grain department of the Updike Grain Co. until the company's withdrawal from the merchandising end of the business. He has had 15 years' experience in the grain business in Milwaukee and has had practical experience as a grain inspector.

James P. Hessburg was formerly identified with the consignment department of the Armour Grain Co. at Minneapolis, Minn., and established an office for that company at Sioux Falls four years ago. He has been engaged in the grain business for 10 years.

Kurtis R. Froedtert, owner of the Moering Grain Co., has turned this business over to the Froedtert Grain & Malting Co., the business having grown to such proportions the change was necessary to give the best possible service to clients. A large volume of grain can be handled under the new arrangement without interfering with the malt operations. In its three elevators at Milwaukee, Red Wing and Winona, Minn., the company has up-to-date machinery, and with a few changes now being made will be able to utilize the 2,500,000 bushels storage capacity to the best advantage of its clients.



J. Walter Rice, Milwaukee, Wis.



James P. Hessburg, Milwaukee, Wis.

Seeds

CORDELE, GA.—C. B. Woodson has been elected pres. of the Georgia-Florida Seed Co.

HELENA, MONT.—A seed warehouse will be erected by the Western Seed Co.

MT. PLEASANT, MICH.—The Sweeney Seed Co. has built a 75-ft. addition to its warehouse.

SHEPHERDSVILLE, KY.—The seed warehouses of Smith & Smith and C. A. Lutes were destroyed by fire recently.

NEW CARLISLE, O.—I am not in the grain or field seed business.—C. C. Vale.

TWIN FALLS, IDA.—The Courteen Seed Co. has opened a branch here with Walter A. Lohr as manager.

MILWAUKEE, WIS.—D. Peck, formerly with W. H. Small & Co., Evansville, Ind., is now with the World Seed Co.

ST. LOUIS, MO.—R. W. Pommer has been made chairman of the seed com'te of the Merchants Exchange.

SPRINGFIELD, ILL., Mar. 15.—Clover seeding has begun and the demand for seed is good.—A. J. Surratt, agricultural statistician.

THE ANNUAL convention of the Wholesale Grass Seed Dealers Ass'n will be held in Chicago, June 19 and 20.

DES MOINES, IA.—I. D. Hooker plans to enter the seed business, and to form a corporation under the name the Grain Belt Seed Co.

TEUTOPOLIS, ILL.—J. M. Schultz, who operated a reinforced concrete and brick seed plant here, plans to build an addition during the summer.

ST. PAUL, MINN.—The Millers Seed Co. has been incorporated with capital stock of \$10,000 by S. Anderson, J. L. Johnson and W. B. Miller.

GRAND RAPIDS, MICH.—The Holland-American Seed Co. has been organized by Wilbur Luikens and John Schipper to engage in the seed business.

BARABOO, WIS.—W. I. Cole has become a partner in the seed and feed business of J. Briggs & Co., and the business will be enlarged.

CRAWFORDSVILLE, IND.—R. S. Lenhardt, formerly located at Carnesville, Ga., is now manager of the wholesale and retail garden seed dep't of the Crabbs Reynolds Taylor Co.

SIoux CITY, IA.—The Haley-Neeley Co. has opened a wholesale field seed business here in connection with its houses at Huron, Mitchell, Aberdeen and Sioux Falls, S. D., and Carroll, Ia., and Norfolk, Neb.

Imports and Exports of Seeds.

January imports and exports of seeds, compared with January, 1921, and for the 7 months ending with January, are reported by the Bureau of Foreign and Domestic Commerce as follows:

IMPORTS.				
	January 1922.	January 1921.	7 mos. ending Jan. 1922.	7 mos. ending Jan. 1921.
Beans, bus.	13,393	36,958	103,759	677,103
Peas, bus.	82,657	31,938	443,383	1,440,212
Castor beans, bus.	42,708	11,187	637,422	534,816
Flaxseed, bus.	1,034,125	386,638	8,028,916	11,225,600
Red clover, lbs.	421,142	875,176	2,941,253	1,382,190
Other clovers, lbs.	1,097,900	988,866	9,177,057	4,193,616
Oth. grass seeds, lbs.	707,803	809,942	13,655,781	4,225,221
Sugar beet seeds, lbs.	696,385	928,635	2,070,398	14,483,352
EXPORTS.				
Beans, bus.	99,376	151,634	726,446	584,583
Peas, bus.	8,194	25,911	58,460	116,727
Flaxseed, bus.	2,036	26	2,147	1,271
Clover seeds, lbs.	407,220	716,200	2,916,146	2,910,210
Timothy, lbs.	2,093,042	2,903,711	11,763,481	7,661,723
Oth. grass seeds, lbs.	277,568	.....	2,589,740	3,546,748

MODESTO, CAL.—The San Joaquin Seed Co. has bought the business of the Bomberger Seed Co. here, and at Fresno. E. J. Lyng, who was with the Bomberger Seed Co., has an interest in the San Joaquin Seed Co.

GREENEVILLE, S. C.—The interest of J. E. Bryson in the Bryson-Holcombe Seed Co. has been bought by the Holcombe brothers, and Mr. Bryson has retired. A. C. Hattaway, formerly with the Alexander Seed Co., Augusta, Ga., has also entered the organization.

THE annual meeting of the Ass'n of Seed Analysts of North America will be held in Chicago during the week of June 19, in conjunction with the conventions of the Wholesale Grass Seed Dealers Ass'n and the American Seed Trade Ass'n. A joint half-day session of the seedsmen and the analysts is being planned.

EXPERIMENTS which have been conducted by the U. S. Dept. of Agriculture show that by growing alfalfa seedlings in greenhouses, where the proper control can be exercised over the number of hours of daylight allowed to reach them each 24 hours, it is easily possible to distinguish between seedlings of the commercial alfalfas.

OTTAWA, ONT.—The Dominion Bureau of Statistics, in its final report on Canadian crops for 1921 estimated flaxseed production to have been 4,111,800 bus., compared with 7,997,000 bus. in 1920; that of peas, 2,769,981 bus., compared with 3,528,100 bus. in 1920; and that of beans, 1,089,000 bus., compared with 1,265,300 bus. in 1920.—Canadian Trade Commissioner, New York.

SHIPMENTS of clean shelled corn may be made from regions quarantined because of the European corn borer, but care should be taken that no parts of stalks or cobs are contained within the corn. If the requirements of the quarantine provisions are not fulfilled the shipments may not be made and in case of unlawful shipment the penalty for violation will be imposed on the shipper. This matter is of especial interest just now at the time when seed corn is being moved.

REGULATIONS were issued by the Board of Agriculture of Virginia, effective Mar. 1, defining "germination" and "hard seeds" as these terms relate to the tagging of field seeds under the state law. Germination is defined as sprouting when subjected to the tests approved by the Ass'n of Seed Analysts of North America. Hard seeds are described as those which remain impervious to water thruout the test, and these may not be counted in the percentage of germination. It is permissible to show the percentage of hard seeds on the tag.

From the Seed Trade.

Sweet Clover Taking Place of Medium Red.

Malvern, Ia.—Farmers are sowing the usual amount of grass seeds. However, white blossom sweet clover seems to be taking the place of medium red to the extent, at least, of 50%.—A. P. Kilmartin.

Overstocked on Alsike.

Toledo, O.—Alsike continues to be a drug on the market. Dealers are overstocked and some will not buy any low grades at any price. We advise against the consignments of alsike. Keep it home until the demand shows some signs of improvement.—The C. A. King & Co.

Seed Trade Active.

Canton, O.—Field seed trade has been very active in this section. The demand for clover seed and oats is exceptionally heavy. There is more demand for alsike clover than in former years. Sweet clover is being planted more extensively in this section.—Holmes-Leatherman Seed Co.

Flaxseed Business Light.

Minneapolis, Minn.—The uncertainty caused by the delay in tariff legislation, and the liberal offerings of foreign oil, have destroyed the confidence of buyers of flaxseed and linseed oil and not much business is being transacted even at reduced prices. Argentine shipments much lower than last year, and Indian shipments larger. Stocks of flaxseed in the northwest

continue to diminish and mills have already begun to close down with only a remote possibility of resuming operations before a new crop.—Archer-Daniels-Linseed Co.

Clover Seed Scarcity?

Toledo, O.—Must be scarcity of clover seed in many sections, otherwise Toledo stocks would not shrink so fast. Not much left here.

Weather was bad for some time through the central states as well as the south, but shows improvement and should stimulate the country demand. Toledo dealers not working nights, but hope for a good movement soon.

Of course any surplus of consequence at the wind-up means it will go to the October level. In the meantime the April longs expect to stand for delivery and figure they can use it.

October has not become active enough to get much of a line on it. It's a long way off and will reflect the growing conditions, the carry-over and foreign prospects as well as imports. Many doubt you'll see as cheap seed the coming season as last. October sold at \$8.85 this last season, and some think the price will be double before it all reaches the ground. If so, won't around \$12.00 be a fairly safe level to work on?

Many articles, as well as grain and seeds, were sold under pressure while wages stayed up. Grains and seeds may not sell as low again for several years.—J. F. Zahm & Co.

North Dakota Farmers Elevtr. Ass'n and U. S. G. G.

In his annual report, delivered to the recent convention of the North Dakota Farmers Grain Dealers Ass'n, Sec'y P. A. Lee of Grand Forks, dwelt at length on the U. S. Grain Growers, Inc., and explained something of his position toward that organization. He said:

That the farmers elevator companies have a right to terminal marketing there can be no question. However, the principal question before the farmers elevator companies today is that of whether or not a selling agency shall be organized and operated in competition with the regularly established exchanges that we now have and which have heretofore operated, we believe, with a marked degree of success, and which certainly have been a wonderful improvement over the marketing system that prevailed previous to the organization of such exchanges.

Inasmuch as the farmers elevator companies have been successful, we believe it is a sound argument that any steps taken towards entering the terminal marketing field the local farmers elevator companies should and must be the nucleus from which terminal marketing agencies are established. In other words, the farmers elevator companies must be the foundation upon which a sound organization is built.

The officers felt, as they do now, that the contracts submitted by the U. S. Grain Growers, Inc., have not been promulgated with a view towards protecting the best interest of the local farmers elevator company, but on the other hand they have undertaken to contract for grain direct with the grain grower, with cross contracts with the local farmers elevator company, independent dealer or line company as the case may be, for the handling of such grain, allowing such company or dealer merely enough handling charge to pay the necessary cost of handling such grain without any apparent intention of allowing anything for depreciation, reserve or interest on the investment.

Under these contracts local elevator companies are not permitted to buy the grain and sell it again where they can get the best market.

It is your sec'y's impression that any elevator company that handles U. S. Grain Growers grain must keep a double set of books, one set for the U. S. Grain Growers grain and one set for its own business. This will lead to confusion and will also make it difficult for the local manager to satisfy his customers or patrons at all times.

We believe past experience has proven conclusively that it is inadvisable to set up machinery which competes with the machinery already established and which with minor faults has operated in the past 30 years with marked success. In view of this, the sec'y believes that the best, most economical method of entering the terminal marketing field is to operate thru the already existing machinery by organizing commission firms or a firm to handle the growers grain at the terminal markets thru the existing channels, building from the local farmers elevator companies as the foundation and upon which the terminal marketing as well as the exporting agencies must rest.

This will in a measure insure the management of the marketing and exporting agencies in the hands of experienced practical grain men rather than place the management of such business in the hands of politicians and dreamers who have had little or no practical experience and who, there is reason to believe, jumped into a proposition like this in order to keep before the public eye.

New Elevator and Mill at Sidney, Mont.

Sidney, the enterprising county seat of Richland County, Montana is on the Richey branch of the Great Northern and on the Sidney branch of the Northern Pacific railways.

Illustrated herewith is the new grain handling plant recently erected at Sidney by T. E. Ibberson & Co., for the Russell-Miller Co.

The mill building is five stories high and will be equipped to turn out 1,000 bbls. of flour per day. Extending from one side of the mill building is a flour warehouse. This building is 138 x 42 ft. on the ground, a part of this building has two stories.

A 400 horse power steam engine is housed in the fire-proof engine and boiler room which furnishes power for the mill building and drives generators for the motors that are located in the elevator.

The 80,000 bushel modern elevator is equipped with four legs to top of elevator and a short leg housed at track for delivering grain from track scale pit to main elevator legs.

On the workfloor is located a power man-lift giving access to both cupola floors, a 300 bushel Fairbanks Morse typeregistering hopper scale and two Wilford Blenders delivering wheat to same; A P and R double receiving separator is also located on workfloor.

The receiving scale in driveway is a Fairbanks 10 ton 26 x 9 dumpscale equipped with an air truck dump and recording beam. At the track side a new type Fairbanks track scale is installed and covered by a track shed. This scale being set on a Minnesota specification.

The elevator heads are all equipped with the new distributors fitted with all steel spouting. Well casing spouts deliver to mill building and cars on track. The elevator has 28 bins and all power is furnished for elevator by motors, 79½ horse power being used; each unit having a separate drive. Silent chain drives are being used throughout. A large car puller is located on track side of building, placed so as to handle cars on two separate tracks.

A large office building is divided into three rooms, a private office, public office and testing room. A large fire-proof vault is built into office, also wash rooms, shower bath etc. Shower baths and steel lockers and a lounging room are also provided for the mill employees in the mill building.

These buildings replacing those burned last October were built complete in 14 weeks which

is considered a record taking into consideration that the materials came from many different states, some coming from the East and some even coming from Canada and the work was all carried out in winter weather. Eight car loads of cement were used for foundation.

The roofs are all covered with Green Carey Jumbo asbestos shingles laid over one ply Philco prepared roofing, this all insulated with 15 lb feltex and makes one of the best possible roofs. The 5 floors in mill building are all of hard maple laid over 2" dressed and matched flooring for a lining. All floors in warehouse, elevator, office etc. are hard maple laid over 1" board lining.

Double car shovels are provided for unloading cars. Mill machinery is now being installed in the mill building and the owners expect to install a complete sprinkler system throughout the whole plant for taking care of any fire.

Mr. Stewart is the local manager at Sidney.

Investigating Farm Agitators.

Claims of farm leaders at Washington that they represent millions of agricultural voters are under investigation since Ex-Senator William S. Kenyon's recent speech as a private citizen.

Addressing college students at Columbia, Mo., on the eve of his induction as a judge of the United States Circuit Court of Appeals, the former leader of the Agricultural Bloc in Congress is reported to have stated that Washington was swarming with so-called farm leaders purporting to speak for "millions" of organized farmers when in reality they had but little influence back home.

The earnest attention paid to the requests of these spokesmen for consideration of their legislative programs has enabled them to receive unusual favors from Congress on the supposition that they represented larger bodies of voters than now seems to have been the case. Just how much their backing has been exaggerated and what effect the disclosure of the true situation will have on their future ability to secure favorable legislative action for their "pet" bills, are questions being asked in political circles as a result of Ex-Senator Kenyon's candid admission.

PLACING of Toledo in the eastern standard time zone, beginning at 2 a. m. Apr. 1, has been authorized by the Interstate Commerce Commission.

Omaha Exchange Replies to Questions.

The Educational Com'ite of the Omaha Grain Exchange has recently given, in answer to an enquirer, a frank and honest statement of the service rendered by the Exchange and by its members in assisting in marketing the grain crops of the country.

The request for information was addressed to the Exchange by R. S. Bradley, of Ulysses, Neb. He asked for information as to the salaries paid officers of the Omaha Grain Exchange, the amount of money made by the Exchange during 1921, asked to be told why the Exchange thinks the producer should not market his own grain and in what way the Exchange is interested in the farmer.

The reply of the Educational Com'ite stated that only one officer, the sec'y, receives a salary. All others, including the pres. and vice-pres., serve without pay. The operating profit of the Grain Exchange for 1921 was given as \$2,830.09, which was applied in payment of the bonds and interest on bonds issued when the Exchange Building was erected in 1916. In 1920 the operating loss was \$12,043.80.

A complete printed copy of the rules of the Exchange not being available, Mr. Bradley was told that he might examine the rules at any time by making application to the sec'y at his office.

To the question asking why the Exchange thinks the producer should not market his own grain the Com'ite replied that there is no reason, so far as it knows, why producers should not market their own products, if they could receive as much for them as they get now. The Com'ite said:

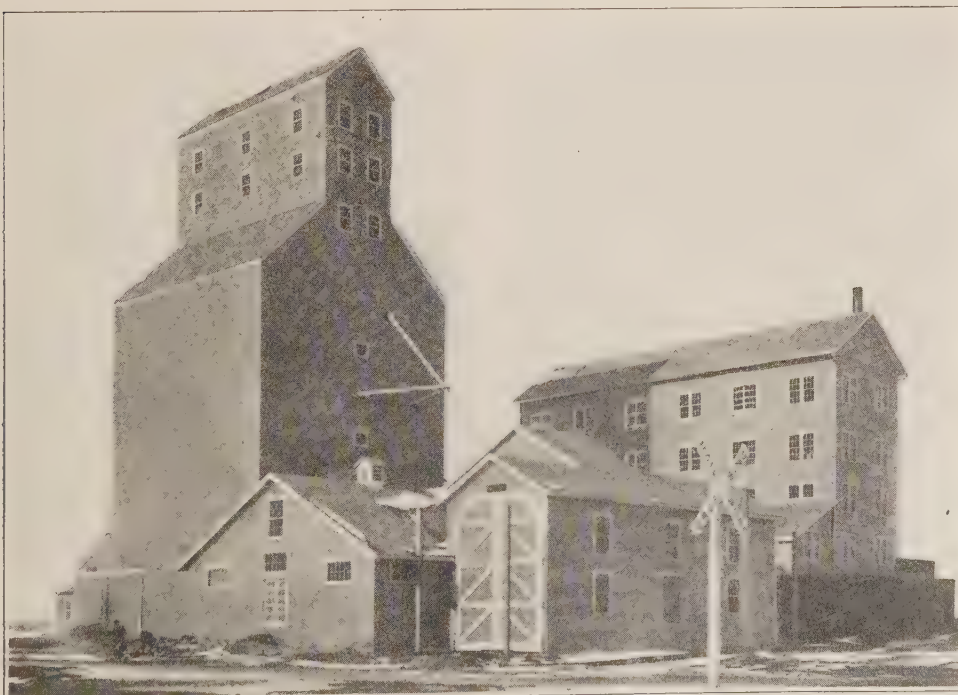
It is our understanding that organizers wish to centralize the selling of the farmers' grain into one channel, whereas experience has taught a great many of the grain dealers that competition and bidding for the farmers' grain is what makes higher prices. Therefore we believe that organizing in such a way as to force all the farmers' products into one channel is not a good plan, as the farmer would be deprived of the competition which enables him to receive higher prices for his grain.

The Com'ite stated that within the past 4 months organizers have told farmers that grain merchants were making 30c a bushel exporting Nebraska corn thru New York, corn for which the farmers were paid 25c per bu. This charge was refuted by the statement that it was not true, that it was made to induce farmers to "sign on the dotted line," and that at the time the freight rate on corn to New York was so high that Nebraska corn could not be shipped there, altho a considerable quantity was exported thru New Orleans, to which port the rate was lower.

A table was then given Mr. Bradley, showing the results of Omaha dealers' experience in merchandising 1,008,000 bus. of corn for export during January and the first half of February. The quantity, price delivered New Orleans, price basis Omaha, and the cash price at Omaha was given on each of the 47 lots considered. In each case, the net price at which the lot was sold was compared with the price that it cost to re-buy the same grain at the same time on the cash tables at Omaha, and the resultant profits to the dealer varied from considerably less than nothing to slightly over one cent per bu. A profit of 1c or above was realized on only 3 or 4 of the 47 lots.

The Com'ite closed its letter with the following statement of the aims of the Omaha Grain Exchange:

The Omaha Grain Exchange is striving in every way possible to assist in marketing the grain crops in the most economical way, and the members are using for the purpose all the accumulated experience of past years, so that the expenses shall be reduced to the lowest possible limit, and so that the farmers shall receive the last cent that the best marketing facilities can secure for them. The "grain merchants" are not accumulating excessive wealth. They are trying to earn a livelihood, and some have "dropped out" because not possessed of sufficient skill to meet the sharp competition that has cut the profits so low that no excessive profits now exist except in the fevered and distorted imaginations of the professional organizer.



New Grain Handling Plant of Russell-Miller Co. at Sidney, Mont.

Why the Elevator Burned

THE ENGINE BACKFIRED.

The engine in the elevator of M. Chamberlain, Delia, Kan., backfired when it was being started. Some kind of an explosion occurred, tearing the magneto from the engine frame and carrying flames to all parts of the room. The adjuster was of the opinion there was carelessness in starting the engine, and perhaps in handling gasoline at the plant.

OVERLOAD RELAYS DID NOT FUNCTION.

Failure of overload relays in motor circuits in the plant of the Victory Flour Mills, Ltd., Vancouver, B. C., to trip out when an overload was placed on the machines caused the motors to become overheated. Defective wiring of the relays caused the trouble. This shows that a safety device is only able to perform its service when the device itself is safe.

SPARKS THRU HOLES IN SIDING.

In reporting a fire that destroyed the elevator of Jordan & Baird, Kewanee, Ind., the adjuster said the last time he saw the plant it was in poor repair, and he gave it as his opinion, after talking with two persons who saw the fire early, that it was caused by engine sparks that gained access thru holes in the metal siding.

A SHINGLE ROOF.

A shingle roof, a heavily loaded freight train, a burned elevator. An old, old story, reenacted this time at Adair, Okla., where the plant of the Mayes County Co-op. Ass'n was destroyed. The freight train passed about midnight, and the fire was discovered at 1:00 a. m., at which time the corner of the elevator roof was on fire and the blaze was running up the side of the cupola.

AN OVERHEATED STOVE.

While F. D. Walter, of Studley, Kan., was away from his elevator some person put a fresh supply of coal into the office stove. Knowing nothing about this, and thinking the fire low, Mr. Studley did not examine the stove when he closed the office. Later, the wind changed and created a better draft thru the chimney. The stove became overheated, the fire was communicated to combustible material inside the office, and the whole plant was destroyed.

MOTOR NOT PROPERLY INSTALLED.

A substandard installation of an electric motor is thought to have caused the fire that burned the Assaria, Kan., elevator of the Western Star Mill Co. The motor was a single phase, 220 volt, 60 cycle machine with the control on the first floor. The adjuster was given to understand there were no protective devices in the circuit. It is not known that the fire was started by the electrical equipment, but it originated in the cupola and could not be extinguished with chemicals because it had gained too much headway.

ELECTRICAL SHORT CIRCUIT.

The chief of the local fire dept was the first man to reach the elevator of the Land Milling Co., Neodesha, Kan., after the fire was discovered. He found doors and windows locked, and when the front door was broken in the house was full of smoke. The chief undertook to turn the switch controlling the electric lights and received a severe shock. This caused him to believe the fire was due to a short circuit in the electric wiring. There had been previous trouble with a short circuit, and representatives of the electric light company considered this to be the cause of the fire that destroyed the plant.

OPEN GASOLINE CAN.

An open can of gasoline is a mighty dangerous instrument to use in priming a gasoline engine, according to the report on the fire that destroyed the elevator of the Farmers Union Elevator Co., at Abdal, (Superior p. o.,)

Neb. The manager and his helper were trying to start the engine, using gasoline contained in an old tomato can for priming. The engine backfired, ignited the gasoline in the can, and when the helper dropped this to escape the flames that were enveloping him the wood siding caught fire. Then the whole plant burned.

WATER BARRELS FIRST THOUGHT.

When many of the employees were away from the plant at the noon hour recently a small fire occurred in an Illinois grain handling plant. This plant is equipped with water barrels and buckets, fire extinguishers and a standpipe and hose. The fire was so located that the barrels and buckets were farther from it than the other fire fighting equipment, but the employees who discovered the fire went past the extinguisher and standpipe, took a bucket of water from the barrel and put out the fire. It is most natural for the ordinary individual to look for a bucket of water in case of fire; and that's why barrels and buckets save many structures.

A HOT AIR FURNACE.

A hot air furnace in connection with a drier in the elevator of the Parma Co-operative Elevator Co., Parma, Mich., nearly succeeded in burning that plant recently. The furnace was installed on the first floor of the elevator, and underneath the drier on the floor above. The furnace was placed on a brick floor made of one course of brick laid on mortar on top of a wood floor. The cast iron bottom of the ash pit rested directly on the bricks, with no air space between.

When the operator opened the plant one morning he found it filled with smoke, and the source was quickly located as being in the furnace room. He kept the fire in check until the village chemical engine arrived and extinguished it. Later investigation showed the boards beneath the brick floor to have been badly charred, and the insurance adjuster formed the opinion that the trouble had been a long time brewing, only breaking out when a favorable opportunity presented itself.

CHOKE NOT INVESTIGATED.

The agent of the Red Lake Falls Milling Co., Bangor, Minn., had been transferring flaxseed from side bins to overhead bins during the evening, and about 7:30 p. m. the bin filled and choked the elevator. The cupola was rather inaccessible and when the choke was discovered the operator stopped the machinery, locked the door, and went home.

Three hours later fire was discovered in the cupola. Insurance investigators are of the opinion that it was undoubtedly caused by friction of the belt on the head pulley before the choke was discovered and the machinery stopped. If the operator had appreciated the fire hazard of a slipping belt he should not have done as he did in failing to investigate the choke in the evening.

WE do not commend the public in general for its attitude toward future supplies of grain for we regard that attitude more as the result of stupidity or indifference rather than to any knowledge of the real situation, but the fact remains that, because of the indifference of the public in general, and its failure to stock up with supplies for months ahead of its needs, we now find the first of April approaching with rather overwhelming supplies for which there is little demand. But here is the peculiar situation, for just as the general public refused to believe in future scarcity when scarcity seemed imminent, so now the general trading public refuses to believe that the theory of scarcity has been exploded; and just as the general public refused to buy to supply its needs in time of danger of scarcity, so now the general trading public refuses to quit buying for speculative purposes, now that all danger of scarcity is past.—L. L. Winters.

Plan for 1922 Grain and Hay Show.

Representatives met in Chicago Mar. 17 to complete arrangements for the 1922 International Grain & Hay Show, to be held in the fall in connection with the International Live Stock Exposition.

The call for the conference was issued by Prof. G. I. Christie, of Purdue University, sup't of the Show, following the semi-annual meeting of the governing board. Each state was represented by a representative who participated in the preparation of the most comprehensive premium list yet offered. L. H. Newman, of the Canadian Seed Growers Ass'n, was elected delegate from Canada.

The Chicago Board of Trade has renewed its \$10,000 premium list for the Show, this being the fourth consecutive year the Board of Trade has contributed this amount.

In the 1921 show 3,312 samples of grain and forage crops were exhibited. This year it is hoped the number will be increased materially.

To Build Terminal Elevator at Capetown, South Africa.

The South African government recently decided to adopt a comprehensive scheme for the erection and operation of country and terminal grain elevators for handling the large crops of grain, principally corn, now being grown in that country. The contracts for construction and equipment of the buildings have now been let.

One unit of the system will be a terminal elevator at Capetown. This will have capacity of 30,000 tons, or approximately 1,200,000 bus., and will be built in Capetown Harbor at a point where the largest ocean going vessels can be berthed.

The plant will consist of a working house, a bin storage building with capacity for 6,000 tons, a storage annex consisting of bins only with storage space for 24,000 tons, and a track shed for receiving grain from cars. The whole will be of reinforced concrete.

The storage annex will have 42 cylindrical bins and 30 interstice bins. The track shed will be arranged along one side of the working house and will have four tracks. Hydraulic car dumpers will be installed, and conveyors will carry the grain from the track hoppers to legs in the working house. The legs will deliver to automatic scales in the upper portion of the house, and these will discharge to conveyors running out over the bins of the working house and annex. It will be possible to receive grain at the rate of 1,000 tons per hour.

Conveyors will operate in tunnels beneath the storage annex for removing grain from bins for shipping purposes. These will discharge into the leg boots, and after being elevated and weighed the grain will be placed in shipping bins. From the shipping bins, it will be conveyed by four lines of conveyors to still other conveyors running along the jetty. The latter conveyors will deliver to four traveling loaders which will spout the grain direct to ships' holds.

Grain cleaning and drying machinery will be installed, and there will be a complete dust collecting system, including an incinerator. All machinery will be driven by electric motors, and passenger lifts will reach all floors of the plant, while telephones, signals and speaking tubes will provide communicating means. The contract for the machinery has been let to Henry Simon, Limited.

A course in the science of grain treatment began at Berlin, Germany, Mar. 20 and will continue until Apr. 1, under auspices of the Grain Treatment Research Institute. The object is to impart to students a scientific knowledge of raw materials, products and by products of the milling and processing of grain. Each student is provided with an experimental bench, and the instruction is carried out by means of experiments which the student actually performs.

Grain Trade News

Reports of new firms, changes, deaths, casualties and failures; new elevators, improvements, fires and accidents are welcome. Let us hear from you.

ARKANSAS

Clarksville, Ark.—Mail addressed to C. C. Albritten has been returned marked "removed."

England, Ark.—We have incorporated with a capital stock of \$50,000. The title of our company has been changed from the England Grain & Commission Co. to the England Commission Co.—J. E. Robinson, sec'y, England Commission Co.

CALIFORNIA

Los Angeles, Cal.—The plant of the Western Hay & Grain Co. is being enlarged to meet the company's expanding business.

Los Angeles, Cal.—W. R. Counter, deputy grain inspector, died Mar. 14 from pneumonia. His widow and one child survive him.

Coalinga, Cal.—L. C. Mayhew has bot the warehouse formerly owned by the Union Tool Co., and plans to use it for public grain storage.

Santa Cruz, Cal.—J. H. Haulschildt, local agriculturist, has bot property here and it is the present intention to build a grain warehouse on it.

Riz (Willows p. o.), Cal.—Mail addressed to W. H. Stewart, who was reported some time ago to be erecting a rice handling plant here, has been returned marked "moved."

Los Angeles, Cal.—M. Finks, formerly assistant mgr. for the B. F. Avery & Sons Plow Co. of Omaha, is now connected with Bridge & Bullick in the grain brokerage business.

Ducor, Cal.—H. C. Carr of Porterville addressed a group of Ducor citizens, and while plans are as yet in a tentative stage, it is believed that an elvtr. here will be the result.

Stockton, Cal.—Application in the superior court was filed by the Frank A. Guernsey Grain Co. to change its name to the Guernsey-Ames Co. The applicant is also desirous of having new stockholders added to the company.

CANADA

Montreal, Que.—The Wilkinson Grain Co., Ltd., has been incorporated.

Fort William, Ont.—The current report that we are building an elvtr. here is untrue.—Archer-Daniels Linseed Co., Minneapolis.

Vancouver, B. C.—McLellan & McCarter Co., Ltd., and Vernon & Buckfield are having their plants overhauled. The J. J. Ross Mill Furnishing Co. is doing the work.

Basswood, Man.—Fire destroyed the elvtr. and flour shed of the Ogilvie Flour Mills Co., Ltd., Feb. 17. The elvtr. contained 25,000 bus. of grain and almost a carload of flour.

Winnipeg, Man.—We are indebted to Sec'y R. Magill for a copy of the 1921 annual report of the Winnipeg Grain Exchange. It contains 173 pages of valuable and interesting information about the Grain Exchange for 1921.

Port Arthur, Ont.—The contract for the erection of the 1,500,000-bu. annex to the elvtr. of Jas. Richardson & Son, has been let to the Barnett-McQueen Co., Ltd., and not to a Minneapolis company as previously reported.

Winnipeg, Man.—Edward Brown, Manitoba treas., has decided to impose a tax only on all elvtr. transactions originating in Manitoba. Big line elvtr. companies are benefited by this, as they objected to having trades taxed outside of Manitoba.

Chatham, Ont.—The Canada Flour Mills Co., Ltd., is offering \$250,000 of preferred shares for public subscription. The stock issue will give the company new working capital and credit. Two shares of common stock, valued at \$10 each, will be given with each share of preferred sold. W. D. Robertson is the new mgr. of the company.

Winnipeg, Man.—Jackson Bros. & Co., of Chicago, will establish a branch office here. H. W. Eyres, well known local grain man, will be in charge. He was formerly mgr. for Chas. E. Lewis & Co. and later was with James Caruthers & Co.

Montreal, Que.—Chaplin Bros. & Co. were awarded the verdict in their suit against James McDonnell for \$45,000, alleged to be due on four promissory notes. The case had to do with purchase and sale of grain that Chaplin Bros. & Co. bought for McDonnell and which grain was received but not accepted. They then stored the grain and later sold for McDonnell's account.

COLORADO

Denver, Colo.—L. F. Flower, mgr. of the Western Produce Sales Co., has removed to Montrose, Colo.

Deer Trail, Colo.—I am getting leases from the Union Pacific for sites suitable for elvtrs. at Buyers and Peoria. I still operate my house at Omar.—W. E. Conn.

Longmont, Colo.—H. F. Rover will be the new mgr. of the Farmers Union Co-op. Elvtr. & Supply Co., succeeding Mr. Hopkins, whom ill-health forced to resign. Mr. Rover was formerly mgr. of the Farmers Elvtr. Co. of Denver.

Denver, Colo.—The elvtrs. of the S. B. Ashcraft Grain Co. at Amen (Logan p. o.), Willard and Merino were sold Mar. 14 by auction to the First National Bank of Sterling, which bid them in to protect their mortgage. There will not be much money to pay claims against the company, but all claims will share in dividends that might be paid.—John P. James, trustee in bankruptcy.

Denver, Colo.—At the annual meeting of the Grain Exchange Ass'n. held Mar. 13, C. E. Williams was re-elected pres., N. C. Warren, vice-pres., O. M. Kellogg, vice-pres., L. H. Connell, treas., and C. B. Rader was reappointed sec'y. Directors elected were C. E. Williams, C. B. Seldomridge, J. W. Conley, T. F. Savage, P. Crowe, J. L. Barr, J. R. Forsythe, W. H. Wierman, H. E. Kelly, O. M. Kellogg, N. C. Warren, L. H. Connell and M. Dolan.

IDAHO

Preston, Ida.—Mr. Fisher, formerly connected with the Interocean Elvtrs., is now mgr. of the Farmers Society of Equity, succeeding Mr. Peterson.

Midvale, Ida.—Mail addressed to Geo. A. Urquhart is returned unclaimed. It was reported some time ago that Mr. Urquhart was buying grain here independently.

Mackay, Ida.—The mill of K. McKenzie burned Mar. 15 and is a total loss. Loss amounts to \$30,000 with no insurance. It was being repaired and was to be put into operation April 1 under management of H. C. Ehrlick of Pocatello.

Ferdinand, Ida.—The Farmers Elvtr. Co. incorporated for \$40,000. A total of \$2,600 worth of stock has been subscribed by the five persons connected with the company. They are: Edgar G. Fry, H. W. Uhlenkott, Clemens C. Frei, O. G. Hanson and Albert Nau.

ILLINOIS

Bentley, Ill.—Charles Mecum has succeeded W. S. Walton as mgr. of the Farmers Elvtr. Co.

Illioipolis, Ill.—Harry R. Cross is now with the Farmers Co-op. Co., succeeding J. W. Critchman.

Sidell, Ill.—Alvin M. Ratcliff of Yeddo, Ind., is the new mgr. of the Farmers Elvtr. Co.—A. M. Ratcliff.

Stockdale, Ill.—I expect to rebuild my elvtr. which recently burned, with a fireproof structure.—Geo. H. Weitz.

Willey's (Taylorville p. o.), Ill.—I succeeded Mr. Livergood as mgr. of the Willey Farmers Grain Co.—W. E. Jones.

Peoria, Ill.—G. A. Peterson is mgr. of the office of Cleveland Grain & Mfg. Co. which was opened here in January.

Hallsville, Ill.—R. T. Suttle, owner of the elvtr. here, died at his home in Kenney, Mar. 9. He was 66 years of age.

Minooka, Ill.—The Minooka Grain, Lbr. & Sup. Co. has let contract for electric motors and wiring to P. F. McAllister & Co.

Danville, Ill.—Mail addressed to Farmers Co-op. Elvtr. Co., which was recently incorporated here, has been returned unclaimed.

Lawndale, Ill.—Mr. Hinkle of Beason is the new mgr. of the Lawndale Co-op. Grain Co., succeeding L. C. Ohmes of Lincoln.

Agnew (Galt p. o.), Ill.—I am now mgr. of the Agnew Farmers Elvtr. Co., succeeding Frank Hall Feb. 1.—Jas. E. Leetch.

Macomb, Ill.—The James manufactory site is now the property of the Farmers Elvtr. Co., the deal having just been consummated.

Tuscola, Ill.—W. F. Hopkins, mgr. of the Tuscola Grain Co., has been confined to his home with a severe attack of gripple.

Girard, Ill.—We are considering changing our power to electric. At present we have large boilers and engine.—Girard Elvtr. Co.

Pittsfield, Ill.—The installation of new machinery in the elvtr. of M. D. King & Co. has been completed by P. F. McAllister & Co.

Hull, Ill.—The elvtr. of M. D. King Mfg. Co. was recently covered with galvanized corrugated iron siding by P. F. McAllister & Co.

Ellis, Ill.—We have gone out of business.—Bert Gitzen, sec'y, Ellis Farmers Co-op. Co. (The company recently sold its elvtr. to Davis Bros. & Ash.)

Ottawa, Ill.—I am not in the grain business. Been out of it for a year.—B. F. Kenney. (It was reported that Mr. Kenney had a fire in his elvtr. recently.)

Decatur, Ill.—I severed my connection with Harrison, Ward & Co. Mar. 1, and am entering the grain business as the D. M. Cash Grain Co.—D. M. Cash.

Jerseyville, Ill.—I have purchased H. S. Daniel's interest in Daniels & Neely Elvtr. and will operate under the firm name of H. G. Neely.—H. G. Neely.

Alvin, Ill.—The Alvin Elvtr. was sold to Jean Smith of Rossville, and Geo. L. Merritt of Rossville has leased it and is now operating it.—B. E. Morgan, Rossville.

Keysport, Ill.—E. S. Apple has succeeded Charles Kneier as mgr. of the Keysport Equity Exchange. Mr. Kneier resigned to work on the state road proposition.

Havana, Ill.—Our firm name is B. H. McFadden & Son. McFadden & Co. is located at Peoria. Offices are being arranged now in the Gordon Bldg. for us.—B. H. McFadden & Son.

Utica, Ill.—The three actions in assumption, brought against C. A. Pfund of the Illinois Valley Grain Co., by Peter, Roger and Ella Brannan, have been settled satisfactorily out of court.

Wing, Ill.—The Farmers Grain Co. has employed Mr. Marks to manage their grain business. Mr. and Mrs. Marks have moved from Troy Grove to this place and will occupy the house belonging to the company.

West Brooklyn, Ill.—Regarding the manager of the West Brooklyn Farmers Grain Co., R. E. Jacobs is our mgr. and has been since Jan. 1.—R. E. Jacobs, mgr. West Brooklyn Farmers Grain Co. (It was reported that a new mgr. was to be elected.)

Meeks (Georgetown p. o.), Ill.—Paul Woodruff, who has been operating the Meeks elvtr. since June, 1921, had a fire on the morning of Mar. 12 which destroyed the office and scale. A new office is being built and a first class scale and gas engine will be installed.

Rapatee, Ill.—The elvtr. of the Rapatee Co-op. Farmers Ass'n known as the "West" elvtr., for the past three years idle, has been sold by public auction, the machinery being sold separately and the building going to T. M. Morse for \$800. He intends to convert it into a grist mill.

Crescent City, Ill.—We have lately remodeled a part of our oats house and made a feed room 28x30 ft. We now buy our feed and flour in car lots. At present we are installing two Hall Distributors and making some other minor changes.—W. G. Smith, mgr. Farmers Elvtr. Co.

Keensburg, Ill.—I have purchased the interest of my partner, Chas. Shultz, in elvtrs. here, at Cowling and Shelton, Ind. I have also purchased from A. Waller & Co., Henderson, Ky., their elvtr. and corn crib at Johnson, Ind., and the Henderson Elvtr. Co. at Henderson, Ky.—A. P. Bump.

Chester, Ill.—The elvtr. we are building is of reinforced concrete, 350,000-bu. capacity. Machinery will consist of three legs, 2000-bu. hopper scale, two cleaners, manlift, power shovel, car puller and conveyors. There will be 44 bins, each 11 ft. square by 100 ft. high. The R. C. Stone Eng. Co. is doing the work, and will be completed by July 5.—H. C. Cole Milling Co.

Adair, Ill.—The elvtr. to be built by Bader & Co. here in the spring, on the site of the elvtr. which burned, will be of 35,000-bu. capacity. The house will contain 9 bins and be equipped with one leg, 12"x6" "V" buckets Hall Distributor, 8-bu. Richardson Scale, Fairbanks 10-ton Auto Truck Scale, truck dump and F-M Motors. Provisions are being made for the installation of cleaners at a later date. Contract will be let about April 1.

Glasford, Ill.—A bill for a receiver for the Glasford Banner Farmers Elvtr. Co., which has elvtrs. here, at McKay Landing and Bell Landing, has been filed by 30 stockholders, representing a majority of the \$37,500 capital stock. They declared that the year ending Dec. 31 showed a deficit of \$25,507.25, according to an audit of the books. Stockholders also stated that the elvtr. at McKay Landing is of no value because of faulty construction which allowed the building to settle. It cost \$12,000 when built.

CHICAGO NOTES.

Our firm has discontinued business.—Warner & Wilbur.

Eugene M. Hoyne has withdrawn his application for reinstatement in the Board of Trade.

A vote of members of the Board of Trade will be taken Mar. 27 on paying down profits on open trades.

The directors of the Board of Trade have posted for ballot an amendment to the rules of the Board to permit clearing of trades thru a corporation, when organized.

Sim Fernandez of Springfield was before the board of directors of the Board of Trade Mar. 21 on charges of uncommercial conduct. He was given two weeks to present his defense.

Ernst C. Rycroft, T. F. Lynch, J. A. Rodgers, Jr., of Chicago, C. M. Deakin, Detroit, J. H. Ehrhardt, Pittsburgh, and Chas. A. Funk, Fort Wayne, Ind., were elected to membership in the Board of Trade.

William H. Long, formerly of Bartlett, Frazier & Co. and an associate of James H. Patten, died recently in Los Angeles. He retired some years ago, and had gone to California to live there permanently.

Washburn, Crosby & Co., Minneapolis, have bot the plant of the Star & Crescent Milling Co., oldest mill in Chicago. The capital of the company was \$2,500,000 and capacity is 4,000 bbls. per day. No change will be made in the personnel of the operating force.

Michael P. Green, who has been connected with the J. Rosenbaum Grain Co. for several years, has been appointed superintendent of the elvtr. recently purchased by the company at Kensington. M. Salaba, an employee for 20 years, has been made his assistant.

An involuntary petition in bankruptcy was filed in the federal court Mar. 10, against C. H. Thayer & Co., three creditors alleging claims totaling \$40,030. Mr. Thayer was cited before the directors of the Board of Trade Mar. 21 to explain charges of business irregularities and was given a week in which to prepare his case.

Creditors of E. W. Wagner & Co. will receive in a short time a proposition of settlement from the Creditors Com'te. They will be offered 50% cash and the balance of the assets in notes having a face value of 50% more. This plan will give the creditors the entire assets of the company and save large sums, which otherwise would be dissipated in court costs and attorneys' fees.

M. C. Townsend is now associated with Carhart, Code, Harwood & Co. He was for many years with Merrill & Lyon and after Mr. Merrill's withdrawal from the firm, he became the partner of Mr. Lyon. As the firm he was recently connected with went out of business, Mr. Townsend is now representing the above company.

Agitation has again been started in favor of a new clearing house system, after having been defeated numerous times in the past. It is proposed to form a clearing house corporation in which each member shall have but one vote in the stockholders' meeting, with no limit to the amount of business for each member. Stock will be issued in denominations of \$2,500. At a meeting to consider the matter, Joseph P. Griffin presided, and a com'te was appointed to prepare rules to be submitted to the Board of Trade. Those on the com'te are W. N. Eckhardt, S. C. Harris, S. P. Arnot, J. F. Lamy, A. M. Clement, J. W. McColloch and S. Mincer.

INDIANA

New Carlisle, Ind.—Wm. Miller, mgr. of the Farmers Elvtr. Co., has been appointed postmaster.

New Richmond, Ind.—Geo. B. Shelby has bot the interest of F. L. Hunt in the Union Elvtr. Co.

Remington, Ind.—We are no longer in the grain business.—Washburn Grain Co., J. A. Washburn.

Knox, Ind.—The Farmers Co-op. Co. will build a brick and concrete elvtr. here. W. M. Quick is mgr.

Bunker Hill, Ind.—We have employed C. O. Curran as permanent mgr. of our elvtr.—Bunker Hill Elvtr. Co.

Foresman (Otterbein p. o.), Ind.—A grain sheller has been added to the equipment of W. B. Foresman Co.

Bainbridge, Ind.—We purchased the elvtr. formerly operated by I. A. Leavel, last June.—Wilson-Miller & Son.

Demotte, Ind.—The remodeling of Al Konovsky's elvtr. at this station has been completed by P. F. McAllister & Co.

Huntingburg, Ind.—Our new 300-bbl. mill will be ready for operation in about three weeks.—R. D. Wallace, treas. Wallace Milling Co.

Waveland, Ind.—Smith & Stewart have gone out of business. Mr. Stewart having died and Mr. Smith moved away.—Ethel L. Stewart.

Veedersburg, Ind.—Hiram Jones, formerly mgr. of the Jones Bros. elvtr. at Stone Bluff, has accepted a position here as mgr. of the Farmers Elvtr. Co.

Sidney, Ind.—Stockholders of the Sidney Elvtr. Co. are being paid \$27.32 on each \$100 worth of stock held. The elvtr. of the company burned about two years ago.

Milroy, Ind.—The Milroy & Kentucky interests have acquired the holdings of the West Virginia stockholders in the Milroy Milling Co., the deal involving about \$80,000.

Wabash, Ind.—We did not purchase the King Grain Co. or any elvtr. as previously reported. We did buy out the feed and seed business of the King Grain Co.—Stoops Bros.

Winamac, Ind.—The Farmers Co-op. Elvtr. Co. at a recent meeting of stockholders voted to sell \$15,000 more capital stock, thus giving the company enough capital to operate on.

Malden, Ind.—The Morgan Township Farmers Co-op. Elvtr. Co. has been granted an increase in capital from \$15,000 to \$35,000. The company plans to build an elvtr. here this year.

Rich Valley, Ind.—James H. Downs is now mgr. of the Farmers Co-op Elvtr. Co.—Jas. H. Downs. (He was formerly mgr. of the Farmers Co-op. Elvtr. Co. at Speichers (Wabash p. o.).

Marion, Ind.—One of the elvtrs. of the Farmers Co-op. Grain Co. was entered recently by thieves, who stole a quantity of belting and other equipment. After two members of the board of directors had reported the loss to the police, the culprits were apprehended.

Royal Centre, Ind.—Robbers visited the elvtr. of the Farmers Elvtr. Co. here either Saturday or Sunday night, Feb. 25 or 26, and gained entrance thru a back window by removing the lower sash. Nothing was taken but \$1200 in notes which represent sales of the elvtr. so it is suspected that someone interested in the notes is guilty.

La Crosse, Ind.—C. O. Gifford, our mgr. here, who was seriously injured Jan. 6, when struck by a discharged employe, has not as yet returned for duty.—Chatterton & Son, per J. N. Mc.

Evansville, Ind.—The Chas. C. Klenck Co. incorporated with a capital stock of \$10,000, by C. C. Klenck, Valentine J. Lutz and Arthur J. Lutz. The company will deal in grain, feeds, farm supplies, etc.

Indianapolis, Ind.—The following have been elected to membership in the Indiana Grain Dealers Ass'n: Larkin & Denny, Cloverdale, and F. G. Griffith, Nortonburg (Hope p. o.).—Chas. B. Riley, sec'y.

Speichers (Wabash p. o.), Ind.—Francis Garrison is the new mgr. of the Farmers Co-op. Elvtr. Co., succeeding me. I am going to Rich Valley to manage the Farmers Co-op. Elvtr. Co. there.—Jas. H. Downs.

Hartford City, Ind.—J. C. Cotterman of New Lebanon has purchased the interests of the Hartford City Grain & Milling Co., of which E. C. Wright is proprietor. The company owns two elvtrs. and a flour mill.

Shelby, Ind.—At the same time they bot our plants at Schneider and Ilinoi (Momence p. o.), Ill., last October, the Kankakee Valley Grain Co. also bot our plant at Shelby.—H. M. Freeman Grain Co., Indianapolis, Ind.

Dunkirk, Ind.—The grain and flour mill belonging to Mrs. R. J. Barnes burned Mar. 7. The Knecht Mlg. Co. had a deal on for the purchase of the mill, but it had not been completed. Insurance amounts to \$5,000.

Kendallville, Ind.—The City Milling Co. has mills here and at Wolcottville. We are installing a commercial feed plant at Wolcottville, and sale of stock will provide additional working capital for expansion. Fred M. Clark is pres. and treas. and C. L. Sidle is vice-pres. and sec'y.—F. M. Clark, mgr., City Milling Co.

Evansville, Ind.—A. Waller & Co. have decided to suspend business in their elvtrs. in Indiana, Illinois and Kentucky and will as soon as possible dispose of all their holdings. Two of the company's twenty elvtrs. have been sold, leaving eighteen valued at \$250,000 remaining to be sold. The farmers co-operative movement in Vanderburg county may buy the Union elvtr. belonging to the company here.

Mardenis, Ind.—Emmett P. Beaver, receiver of the Mardenis Equity Exchange, turned over \$23,965.73 to Ed. S. Leverton, clerk of the court, as the result of the sale of two elvtrs., some merchandise, and town property at Roanoke. The elvtrs. were here and at Markle. The elvtrs. of the company at Roanoke and Simpson are still for sale. The money already realized will pay 33 cents on the dollar to the 32 creditors of the company. Another farmers company is contemplating the erection of an elvtr. on the site the old Silvers elvtr. formerly occupied.

North Manchester, Ind.—A recent statement by directors of the North Manchester Farmers Elvtr. Co., which has been in receivers hands since last August, shows that aside from the \$30,-300 stock paid by stockholders of the company, losses in operating have amounted to \$4,321.16. Buildings costing the company \$32,000, sold for \$11,150, a loss of \$20,850. Besides this, there was a loss to creditors, as but 80 cents on the dollar was paid on claims amounting to \$2,000. The loss of \$4,321.16 was guaranteed by directors, and they personally are responsible for this amount. Directors state that as stockholders would have shared in profits, they feel that stockholders should also share the losses, and if this is done, it will mean that 14% of the original amount invested will be lost, or \$7 on each share.

IOWA

Joice, Ia.—J. L. Paulson, mgr. of the Farmers Elvtr. Co., resigned his position.

Cartersville, Ia.—Frank Rogers has resigned as mgr. of the Farmers Supply Co.

Berkley, Ia.—We are going to do some repairing this spring.—Carlson & Peterson.

Gaza, Ia.—Albert Thiesen and Clint Abbott bot the elvtr. of John S. DeVries here.

Winthrop, Ia.—E. E. Collins succeeds Howard Allyn as mgr. of the Farmers Elvtr. Co.

Aredale, Ia.—E. E. Thompson has succeeded Enis Price as mgr. of the Farmers Elvtr. Co.

Reimond, Ia.—The Quaker Oats Co. sold to the Farmers Co-op. Elvtr. Co.—Moore Grain Co.

Rockford, Ia.—Earl T. Apple has succeeded H. H. Hubbard as mgr. of the Farmers Elvtr. Co.

Westgate, Ia.—F. W. Passmore is now mgr. of the Farmers Elvtr. Co., succeeding D. C. Leurs.

Woodburn, Ia.—W. F. Boor bot the elvtr. and coal yard of Keeney & Son and took possession Mar. 1.

Waverly, Ia.—J. J. Lynes has been succeeded as mgr. of the Farmers Exchange by C. B. Henning.

George, Ia.—John Isebrand has resigned as mgr. of the lumber department of the Farmers Elvtr. Co.

Chapin, Ia.—E. Price is the new mgr. of the Farmers Elvtr. Co., succeeding Frank Burwell, who resigned.

Independence, Ia.—C. E. O'Neil has been succeeded as mgr. of the Farmers Co-op. Elvtr. Co. by Frank Swindle of Brandon.

Masonville, Ia.—L. L. Hand is now mgr. of the Farmers Co-op. Comm. Co., succeeding O. A. Sullivan. He was formerly assistant mgr.

Garner, Ia.—Our mgr. is F. W. Steiff.—Farmers Co-op. Society. (It was recently reported that Art Kluckbohn had succeeded Mr. Steiff.)

Kesley, Ia.—There will be no elvtr. built here where the one burned last December. The elvtr. was formerly operated by K. A. Ludeman.—L. M. Chatt.

Davenport, Ia.—A fine new residence in the most fashionable part of Davenport is being erected by H. D. McCord, pres. of the Merchants Elvtr. Co.

Sioux City, Ia.—Beginning July 1, Sioux City will be recognized as a primary market and will at that time be included in the visible supply statement, etc.

Winterset, Ia.—The elvtr. that S. Courtney Brown bot here was a 5000-bu. house, abandoned last fall by Callison & Schoenenberger.—M. Young & Co.

South English, Ia.—W. B. Robison is not mgr. of our company but he is assistant mgr. Albert Noffsinger is the present mgr.—Farmers Grain & Sup. Co.

Dayton, Ia.—R. A. Friend has resigned as mgr. of our company and accepted the management of the Farmers Elvtr. Co. at Lytton.—Farmers Elvtr. Co.

Lytton, Ia.—Robt. L. Jensen has resigned as mgr. of the Farmers Elvtr. Co. R. A. Friend, former mgr. of the Farmers Elvtr. Co. at Dayton, has succeeded him.

Sioux City, Ia.—Frank H. Todd, of the Hoese Grain Co., Merrill, has been admitted to membership in the Board of Trade on transfer from Taylor & Bournique Co.

Albion, Ia.—The stockholders of the Albion Farmers Elvtr. Co. decided to enlarge the feed business of the company and build a storage house suitable for its needs.

Eldora, Ia.—Dwight Terrill, mgr. of the Farmers Co-op. Elvtr. Co. since last fall, resigned his position Mar. 16. No one has been named by directors to succeed him.

Farmersburg, Ia.—H. W. Thompson has bot out the interest of his partners in the Farmersburg Grain Co. and will hereafter be sole owner. The company had dissolved Feb. 22.

Elliott, Ia.—Charles M. Redmon has bot the elvtr. and coal business of R. H. Hillhouse. Mr. Redmon formerly owned the elvtr. now owned by R. C. Kipp. Possession will be given April 1.

Roland, Ia.—When he fell in the belt shafting of an elvtr. here, Andrew Herein, 45 years of age and employed at the elvtr., was instantly killed. Three children and his widow survive him.

Anita, Ia.—Marsh Millhollin, mgr. of the Kunze Grain Co. here for many years, has been critically ill since Mar. 12, his condition being such that it is deemed an operation will be necessary.

Humeston, Ia.—A voluntary petition in bankruptcy has been filed by Geo. H. Dennis, grain dealer here. He lists his liabilities at \$3,727.67 and assets, \$5,452.13. Of the latter amount he claims \$1,700 to be exempt.

Winterset, Ia.—M. Young & Co. are contemplating moving their old 32,000-bu. elvtr. up to their present house as an annex. If this is done, an oats storage plant they now have at the new plant, will be converted into a coal storage plant.

Primghar, Ia.—The Farmers Elvtr. Co. suffered a loss when its elvtr. burned to the ground recently. No grain was burned as there was very little in storage. This is the second fire in elvtrs. here within the past few weeks, as the C. E. Propp elvtr. burned a few weeks ago.

Dunbar, Ia.—Our plant will be sold, but I believe it will be bought in again and re-incorporated.—Otto Tweed, mgr. Dunbar Grain & Stock Co. (Previous report stated this company would go out of business at expiration of their charter in June, and elvtr. would be sold by auction.)

Roland, Ia.—The directors and stockholders of the Farmers Elvtr. Co. voted recently to subscribe for additional stock to wipe out the indebtedness of the company. It was also voted to discontinue the handling of flour, coal and feed and to confine the company's business strictly to buying and selling of grain.

Dedham, Ia.—Theo. Meyer is pres., John B. Seidl, sec'y and Wm. Loeltz is mgr. of the Farmers Grain, Stock & Lbr. Co. which recently took over the elvtr. of the Bourse Grain Co. here. The total capacity of the company's two elvtrs. is now 50,000 bus.—Farmers Grain, Stock & Lbr. Co.

Webster City, Ia.—The office building of the Farmers Grain Co. was moved Mar. 9 from the old site to their new one on the C. & N. W. right of way. As the company was paying rent on both sites, it was decided to move and pay but one rent. It is hoped by the company that it will be able to let contract for a new elvtr. soon.

Davenport, Ia.—D. H. Stuhr, who had an option on the Buerger Elvtr. here, has announced that he will retire from the grain business as soon as he can arrange his affairs. It is his plan to go to California to regain failing health. For 45 years he has been active in the grain trade, being widely known as a grain expert and crop specialist.

Cedar Rapids, Ia.—The undersigned, having retired as pres. of the King-Wilder Grain Co., assumed active management of the Ray Murrell Grain Co. Mar. 20. The company operates elvtrs. on the C. M. & St. P. Ry., C. & N. W. Ry., C. R. I. & P. Ry., and the C. R. & I. C. Ry. doing business as track buyers of grain. We also handle coal, feed and seed.—J. E. Murrell, Jr.

Cornell, Ia.—The Farmers Co-op. Co. has assigned all its property, consisting of elvtr. warehouses, store room and lumber and coal yards, to R. Barglof of Greenville, as the officers admit being insolvent. The assignment was made for the benefit of creditors. Notes to the amount of \$30,000 and claims against the company for \$4,517 on grain, are said to be outstanding.

KANSAS

Garfield, Kan.—C. H. Wagner has resigned as mgr. of the Farmers Co-op. Co.

Lehigh, Kan.—We have only one elvtr. now and that is here.—Karl Ehrlich Grain Co.

Moscow, Kan.—The Moscow Elvtr. Co. is to build an elvtr. at Pleasant, near Liberal, Kan.

Ottawa, Kan.—A small addition is being built to the elvtr. here. It will be used as a warehouse.

Pleasanton, Kan.—I have severed my connections with the Blaker Lumber & Grain Co.—S. Crawford.

Delavan, Kan.—C. Hannah is mgr. of the Delavan Farmers Union Co-op. Merc. Ass'n.—M. L. Gear.

Clyde, Kan.—E. C. Duprey has taken up the duties of mgr. of the Clyde Co-op. Supply Co.—M. L. Gear.

Falun, Kan.—The Farmers Co-op. Ass'n here is planning on installing electric power.—O. Ivar Norden.

Cunningham, Kan.—Lon R. Prose has been succeeded as mgr. of the Farmers Grain Co. by J. H. Dye of Sheridan.

Tampa, Kan.—The Tampa Co-op. Ass'n is installing a radiophone for receiving markets from Kansas City.—M. L. Gear.

Salina, Kan.—J. P. Parks, formerly with the Hall-Baker Grain Co. here, has resigned and returned to Kansas City, Mo., where he was previously located.

Great Bend, Kan.—The Barton County Flour Mill will construct an addition to its warehouse. The structure will be twice the size of the present warehouse.

Dillon, Kan.—John Denny has been succeeded by Mr. Altman as mgr. of the Farmers Co-op. Business Ass'n.—M. L. Gear.

Muscotah, Kan.—The Federal Eng. Co. received the contract to rebuild the elvtr. of Mrs. T. B. Kelley, which recently burned.

Wellington, Kan.—A flour mill here has been purchased by J. C. Conley of Wichita. He will operate an elvtr. in connection with it.

Larned, Kan.—Mail addressed to William Ainsworth is returned unclaimed. It was recently reported that Mr. Ainsworth had bot a feed grinder here.

Fremont, Kan.—The Fremont Co-op. Merc. Co., incorporated with a capital stock of \$20,000 by O. C. Hawkinson, Armond Palmquist and Chas. Sundgren.

Dighton, Kan.—J. W. Hildreth has resigned as mgr. of the Farmers Elvtr. Co. and gone to Fellsburg, where he became mgr. of the Fellsburg Equity Exchange Mar. 1.

Salina, Kan.—Effective April 1 the name of this company will be Freeman-Faith Grain Co., the management continuing the same.—R. M. Faith, mgr. Freeman Grain Co.

Clifton, Kan.—J. P. Coates, who purchased the elvtr. of the Associated Mill & Elvtr. Co. about three months ago, is now open for business. J. A. Stober is mgr.—M. L. Gear.

Fellsburg, Kan.—J. W. Hildreth became mgr. Mar. 1 of the Fellsburg Equity Exchange. He was formerly mgr. of the Farmers Elvtr. Co. at Dighton. Geo. H. Ott was formerly mgr.

Melvern, Kan.—The Associated Mill & Elvtr. Co. closed its elvtr. here for the present at least. I don't know who will operate it in the future.—S. W. Bennett, agt., Associated Mill & Elvtr. Co.

Wichita, Kan.—C. F. Caudill, of the Stevens-Scott Grain Co. was admitted to membership in the Board of Trade. H. E. Bauman, mgr. of the Southern Grain Co., was also elected to membership.

Thayer, Kan.—The elvtr. of White & Johnson burned Mar. 17, at 7:45 p. m. Will Ewing gave the alarm when he noticed the blaze but it was too late to save the building which is a total loss.

Osage City, Kan.—The Osage City Grain & Elvtr. Co. of which F. M. Miller was proprietor, has been taken over by banks and creditors. As soon as arrangements are made a new manager will be secured.

Meriden, Kan.—I do not think there is anything in the report that another elvtr. will be built here. Believe it is all talk, but am unable to say how it started.—Geo. Lake, mgr. Meriden Farmers Union Co-op. Bus. Ass'n.

Emporia, Kan.—The Lord Grain Co. has let contract to the Federal Eng. Co. to remodel the Emporia Elvtr., which is known as the Katy Elvtr. It will be increased 5,000 bu. in capacity and have new Hall Distributor, truck dump and motor.

Sedgwick, Kan.—The Associated Mill & Elvtr. Co. has closed down here. Mr. Hickerson, who has been running the plant for them, resigned Mar. 1, but offered to stay until a successor had been secured. The company closed the plant instead.

Halstead, Kan.—The Farmers Union is negotiating for the stock of the Farmers Co-op. Grain & Merc. Co. which operates the Farmers Elvtr. No definite action has been taken and it is at rest until it is decided if the Farmers Union is to unite with the Wheat Growers Ass'n.

Sawyer, Kan.—Regarding our improvements, we are putting in a new 10-ton scale, truck dump, man lift and two electric motors, one to elvtr. leg and one to the cleaner. We are also putting iron siding on the elvtr. and relining all the bins.—B. N. Dinkins, mgr., Sawyer Equity Exchange.

Hutchinson, Kan.—The report that our Mr. P. M. Clark will move to Hutchinson is incorrect. We do considerable business at Hutchinson and own a membership in the exchange there.—New Era Milling Co., Arkansas City, Ark. (It was previously reported that Mr. Clark would open an office at Hutchinson.)

Atchison, Kan.—Wm. A. Blair, pres. of the Blair Elvtr. Co. and the Blair Milling Co., died at his home Mar. 10 after an illness of only a few hours. His wife and two children survive him. Plans for the rebuilding of the Blair Milling Co.'s plant, which burned a few weeks ago, may be altered by Mr. Blair's death.

Ness City, Kan.—The Ness County Farmers Co-op. Elvtr. Union has incorporated with a capital stock of \$20,000. Incorporators are L. C. Schultz, John M. Leiker and R. W. Snyder.

Chestopa, Kan.—The organization of the Chestopa Mill & Grain Co. here assures this place of a new mill. H. W. Cole of Oklahoma City, formerly mgr. of the elvtr. of Geo. W. Pratt here, and Guy Huggins, formerly grain buyer here for Goodlander Mills, Fort Scott, are at the head of the company. The site for the 100-bbl. mill is 100x250-ft. and located on the Missouri Pacific right of way. It will be four stories high, the first story being of concrete and the rest of brick. A warehouse 100 ft. in length will also be built.

Wichita, Kans.—T. F. Dawkins and John Madden, Jr., both of Wichita, formed the Victory Mill & Elvtr. Co. several months ago incorporated with a capital stock of \$1,000,000. Since that time, they have decided to erect grain elvtrs. only and will change their name to the Victory Elvtr. Co. They bot five acres between the Santa Fe and Missouri Pacific railways and contemplate the erection of a new elvtr. with a capacity of 500,000 bus. This is but the initial building for a series of elvtrs. to be erected at a later date.

KENTUCKY

Corydon, Ky.—The plant of the Corydon Mfg. Co. burned recently with a loss of \$10,000.

Jeffersonton, Ky.—Dewitt T. Davis, grain dealer here, was recently married to Miss Thelma Ernwine of Louisville.

Scottsville, Ky.—The plant of the Scottsville Milling Co. burned Mar. 14. Loss estimated at \$50,000, including flour and grain.

Henderson, Ky.—A. Waller & Co., composed of A. Waller and M. T. Dyer, is disposing of its entire grain business, consisting of 20 elvtrs. in Indiana, Illinois and Kentucky. The reason given is that both owners are in ill-health and have no sons to carry on the work. Two of the elvtrs. have already been sold, the Johnson, Ind., elvtr. being bought by A. P. Bump and the Howell, Ind., plant being bought by the Southern Grain Co. Eighteen plants, valued at \$250,000, remain to be disposed of.—C.

LOUISIANA

New Orleans, La.—I have succeeded Nathan & Petts.—Edward Nathan.

New Orleans, La.—Shepard & Gluck closed out all their trades on Mar. 23. The trouble is said to date back to the failure of E. W. Wagner & Co. which owed them \$17,000. Twelve branch houses were maintained throughout southern states.

New Orleans, La.—Port Commissioner W. L. Richeson of New Orleans was in Chicago this week accompanied by Wm. Dunaway, representing C. B. Fox. Mr. Richeson said the special wharf and marine leg for unloading grain from barges and ships into the Public Elvtr. will be ready to receive grain April 15. The new leg will be able to unload boats over a change of 21 ft. in the height of the river. The improvement is being made at a cost of \$400,000.

MARYLAND

Hagerstown, Md.—Lewis S. Martin bot the grain and feed elvtr. of S. D. Hartranft.

Queen Anne, Md.—My son, R. N. Barnes, Jr., is out of the grain business here and I am operating alone.—R. N. Barnes.

Easton, Md.—R. R. Spring, one of the proprietors of the Easton Mfg. Co., whose plant burned February, 1921, will erect an elvtr. and warehouse.

Baltimore, Md.—The first Monday in April will be marked by the annual auction of grain sample tables on the floor of the Chamber of Commerce. Choice locations are very eagerly sought for.

Baltimore, Md.—Plans are being prepared for officials of the Western Maryland Ry. Co. for further enlargement of their Port Covington elvtr., it being the intention to add 2,100,000-bu. capacity to the plant.

Baltimore, Md.—The Hansen Produce Corp. of Maryland has incorporated for \$10,000, to deal in grain and agricultural products. Incorporators are James L. Watson, F. H. Buthorn and Thomas E. Halle.

MICHIGAN

Wayne, Mich.—H. Goodman is the proprietor of the plant formerly operated by Stellwagon & Snyder.

Atwater (Bad Axe p. o.), Mich.—The Atwater Farmers & Gleaners Co-op. Elvtr. Co. changed its name to the Atwater Grain Co.

Port Hope, Mich.—Mail addressed to Floyd D. Bartlett, formerly mgr. for The Mhlethaler Co. here, has been returned marked "deceased."

Owosso, Mich.—Joseph Rundell has purchased an interest in the Owosso Milling Co., according to announcement by C. F. Dawson, mgr. of the company.

Pulaski, Mich.—J. C. Kitter has resigned as mgr. of the Pulaski Farmers Grain & Elvtr. Co. and is now at Blissfield, where he will manage another elvtr.

Imlay City, Mich.—The elvtr. here, owned by Lewis Steele, burned Mar. 2, with \$6,000 loss, practically covered by insurance. An overheated stove is thought to have caused the blaze. I will rebuild.—Lewis Steele.

Prescott, Mich.—The elvtr. of the Prescott Elvtr. Co., owned by the Saginaw Milling Co., burned recently with large quantity of grain and two cars of beans. Loss about \$30,000.

Detroit, Mich.—Deakin, Cull & Co. have appointed Otto H. Sherlitz as mgr. of their newly created grain department. They have direct wire connections with E. Lowitz & Co., of Chicago.

Allegan, Mich.—The officers of the Allegan Milling Co. are as follows: J. H. Fairfield, pres., W. Haney, vice-pres., G. E. Fairfield, sec'y, and Fred McQuirk, treas. and mgr.—F. E. McQuirk.

Sunfield, Mich.—Smith Bros. & Velte Co. of Lake Odessa have purchased the elvtr. of Geo. Triphagen here, making the number of elvtrs. they now operate s'x. It is said that Ezra Dell of Woodland will be the manager of their new addition.

Grand Rapids, Mich.—Management of the Gleaners Clearing House Ass'n has been taken over by A. F. Breedshall, and it is being re-organized. It was stated that the company had to close some small elvtrs. where no profit was being made, but an audit of the books shows that the company is in an excellent and solvent condition.

Grand Rapids, Mich.—We have not let contract for a 500,000-bu. concrete and steel elvtr. as previously reported. Plans and specifications have been completed by the A. E. Baxter Eng. Co. for a 1,500-bbl. mill and a 500,000-bu. elvtr., but no bids have been asked for as yet, and we do not know just when we will build. We purchased a site and have had it fixed up so are all ready to go ahead with the building fast, once we start.—Valley City Milling Co., Wm. S. Rowe, pres.

MINNESOTA

Franklin, Minn.—The Great Western Elvtr. Co. is considering the erection of an elvtr. here.

Heron Lake, Minn.—I have succeeded Mr. Harmony as mgr. of the Farmers Elvtr. Co.—J. B. Nimmerfro.

Red Lake, Minn.—Mail addressed to the Farmers Produce Exchange, Inc., has been returned marked "unknown."

Duluth, Minn.—Robt. J. Hamp, for several years representative of F. A. Pierce & Co. of Minneapolis, here, died Mar. 17 after a brief illness.

Duluth, Minn.—W. F. Rosar and Parker M. Paine have been admitted to membership of the Board of Trade. John A. Lamb and Joseph Simons have withdrawn their memberships.

Rochester, Minn.—The Rochester Milling Co. will close its plants for four months to undergo repairs and remodeling. New machinery will be installed and the capacity increased to 600 bbls. daily.

Montrose, Minn.—The report that we had taken over the plant of the Cargill Elvtr. Co. is correct, and we will operate it in connection with our mill at Buffalo. We intend to install a feed mill to do feed grinding.—McAlpin & Elsenpeter.

Worthington, Minn.—Elmer J. Wilson, formerly ass't. mgr. of the W. M. Bell Co. office at Algona, Ia., is now mgr. of the company's office here. We now have offices at Algona and Sac City, Ia., and Worthington, Minn.—W. M. Bell Co., Milwaukee, Wis.

Marietta, Minn.—The elvtr. of the Great Western Elvtr. Co. burned Feb. 11, together with several thousand bushels of grain.

MINNEAPOLIS LETTER.

Minneapolis, Minn.—The Commander Elvtr. Co. has increased its capital stock from \$150,000 to \$160,000.

Minneapolis, Minn.—The Chamber of Commerce voted Mar. 16 on the matter of reducing commissions on corn futures to \$1.50 per 1,000 bus.

Minneapolis, Minn.—Frank C. Blodgett, prominent in grain circles here, left for Kansas City to become associated with the Barnes-Carey interests.

The E. L. Welch Co., with branch offices at St. Paul and Duluth and headquarters here, has announced suspension of business, pending rearrangement of its affairs.

Charles M. Loring, for many years connected with the milling trade, died at his home Mar. 18, at the age of 89. In 1886 he was elected president of the Chamber of Commerce, and each year he was re-elected, until 1890, when he refused to serve any longer. His wife, and one son survive him. The Chamber of Commerce suspended business for one minute at eleven o'clock, Mar. 21, in respect for his passing.

MISSOURI

Paris, Mo.—The Producers Elvtr. & Exchange Co. chartered with a capital of \$20,000.

Arlington, Mo.—Mail addressed to the O. P. Duncan Mfg. Co. has been returned marked "unclaimed."

Holt, Mo.—The Holt Grain & Supply Co. has been incorporated with a capital stock of \$25,000. W. A. McGee is sec'y.

Columbia, Mo.—The Columbia Co-op. Warehouse Ass'n incorporated with \$15,000 capital stock, to deal in grain, etc.

Nishabotna, Mo.—The elvtr. of the Farmers Elvtr. Co. burned recently. Elvtr. was insured for \$8,500 and grain, \$2,500.

Gray Summit Mo.—We have sold our mill and elvtr. here and at Pacific to the Eggers Milling Co.—Koppitz-Smith Mill Co.

Palmyra, Mo.—The Farmers Elvtr. Co. has installed a 20-h.p. motor, a 2-h.p. F-M Engine, and a new feed mill in their warehouse.

Fredericktown, Mo.—Present officers of the Fredericktown Milling Co. are Wm. Gudger, pres., and O. C. Whitener, sec'y and treas.—Fredericktown Mfg. Co.

Springfield, Mo.—We are still in business at the same old place.—Compton Commission Co. (It was reported that the Queen City Flour & Feed Co. bot their plant recently.)

Sands (St. Charles p. o.), Mo.—The Florissant Valley Co.-op. Elvtr. Ass'n, of Anglum, has purchased the 7,000-bu. elvtr. of the Nanson Commission Co. here and will operate it as well as their elvtr. at Anglum. They expect to make some improvements on the plant.

St. Joseph, Mo.—The Missouri-Kansas Grain Co., a new organization, has opened offices in the Corby-Forsee Bldg. here. B. H. Henley is pres., F. G. Mueller, vice-pres. and C. Enright, sec'y. The company will operate the Great Western Elvtr., and as the elvtr. is reported in good shape, operation will begin in a few days. The Valley Grain Co. was reported to be about to operate this elvtr., but the report had no foundation.

KANSAS CITY LETTER.

J. L. Rodney of the Rodney Milling Co. died Mar. 17, after being ill but a few days.

Frederick Fisher and F. J. Fitzpatrick have been admitted to membership in the Board of Trade.

W. Sampson has applied for membership in the Board of Trade on transfer from Wyan Nelson.

John J. Knight has applied for membership in the Board of Trade on transfer of the certificate of L. B. McBride.

E. M. Hibbs, formerly in charge of the mill feed department of the Kemper Grain Co., is now with B. C. Christopher & Co.

R. W. Sampson will handle the grain and mill-feed dept. of the W. H. Marshall Comm. Co., having severed his connection with the F. B. Clay Grain Co. A membership in the Board of Trade will be secured for him.

NEBRASKA

Schuyler, Neb.—E. W. Zerzan, mgr. of the Farmers Grain Co., resigned to take effect April 1.

Hayland, Neb.—Leonard Hopkins has been employed as mgr. of the Farmers Elvtr. & Lbr. Co.

Hastings, Neb.—R. C. Pierce has succeeded John H. Robinson as mgr. of the Armour Grain Co. here.

Blue Springs, Neb.—John Zugrner, Odell, has been employed to assist mgr. Wm. Craig of the Farmers Elvtr. Co.

Sterling, Neb.—I am now manager of the Farmers Union Co-op. Ass'n, succeeding Geo. F. Aden.—B. B. Smith.

Bellwood, Neb.—I am now agt. for Nye-Schneider-Jenks Co. here.—J. G. Schwartz. (Mr. Schwartz was formerly at Hallam.)

Guide Rock, Neb.—I do not contemplate erecting a new elvtr. this year.—L. W. Ely. (It was reported that Mr. Ely would build.)

Hartington, Neb.—J. B. Thompson has been elected mgr. of the Farmers Union Exchange, succeeding C. H. Doane, who resigned Feb. 1.

Milligan, Neb.—I am mgr. for the Farmers Co-op. Co.—Edw. Chudey. (It was reported last October that Frank Krisl, Jr., was mgr. of this company.)

Omaha, Neb.—A meeting of creditors of the Washington County Alfalfa Milling Co. will be held here Mar. 28.—B. H. Dunham, referee in bankruptcy.

Crab Orchard, Neb.—R. S. Brott was succeeded Mar. 1 as mgr. of the Central Granaries Co. elvtr. here by Herbert Swanson, formerly of Nye-Schneider-Jenks Co. at Table Rock.

Berks (Crete p. o.), Neb.—I am mgr. of the Farmers Union Co-op. Ass'n, succeeding Mr. Horstmann who has gone with the Farmers Grain Co. of Springfield.—J. A. Keenan.

Lodge Pole, Neb.—We are making general repairs on our elvtr. and installing a 15-h.p. "Z" F-M gas engine.—A. R. Jameson, Jr., mgr. Farmers Union Co-op. Grain & Stock Ass'n.

Springfield, Neb.—I am now mgr. for the Farmers Co-op. Grain Co., succeeding M. O. Christian.—L. F. W. Horstmann. (Mr. Horstmann was formerly mgr. of the Farmers Union Co-op. Ass'n at Berks, Crete p. o., Neb.)

York, Neb.—The Nebraska Grain & Fuel Co.'s Elvtr. and a warehouse belonging to the York Produce Co. burned Mar. 8. Insurance was carried on the elvtr. but none on the warehouse. Loss on elvtr. is estimated at \$3,000 and on warehouse at \$2,500.

Grand Island, Neb.—The Nebraska Consolidated Mills have let contract to the Burrell Eng. & Constr. Co. for a 30,000-bu. reinforced concrete head house to be operated in conjunction with the grain storage. The elvtr. will be equipped with a 2000-bu. hopper scale, cleaner and a wheat washer.

Geneva, Neb.—Twenty-four farmers met here Mar. 4 to take further steps towards forming a co-op. elvtr. company. A constitution was adopted and articles of incorporation authorized. Capital was fixed at \$50,000 with a paid-up capital of \$11,000. John H. Morgan is temporary secretary until election of officers is held.

NEW ENGLAND

Boston, Mass.—At a dinner, Mar. 21, of the Flour & Grain Club, billiard, bowling and pool matches were held, and all present had an enjoyable time.

Holyoke, Mass.—The business name of N. Barowsky, Willmansett, who recently bot the plant of the F. G. Burnham Co., is the B-B-J Coal, Wood & Grain Co., Willmansett.

Ashland, Me.—We do business mostly in retail bag lots. Do not have an elvtr. but hope to build later.—Farmers Supply Corp. (The company was recently incorporated for \$10,000.)

Westport, Conn.—The Saugatuck Grain Co. has been incorporated to conduct a wholesale and retail grain business. Capital is \$50,000. Incorporators are S. Novak, H. Tobin and A. C. Knorr, all of South Norwalk.—S.

Colchester, Conn.—We bought out from receiver the Colchester Farm Produce Co. We are a branch of the Meech & Stoddard Co. of Middletown. The plant being operated by us was formerly the plant of Colchester Farm Produce Co.—The Meech-Brown Grain Co., F. O. Brown, mgr.

Malden, Mass.—The police recently frustrated the plans of yeggs who attempted to open the safe of the Malden Grain Co. Entrance was gained thru a trap door into the office.—S.

Biddeford, Me.—The business of Saco Grain & Milling Co. has been purchased by Charles W. Smith who will continue under the same name. He had been conducting the business for 22 years until recently. Orrin C. Mayo resigned as mgr.—S.

Terryville, Conn.—I have leased a large building and am carrying on business in spite of my recent fire. With the arrival of good weather I expect to do something different, and the location and building will determine largely the equipment I shall need.—J. F. Wood.

NEW JERSEY

Edgewater, N. J.—We are building a mill here at the present time, and, of course, are putting in a large dock, tanks and an elvtr. to handle the grain.—Archer-Daniels Linseed Co., Minneapolis.

NEW MEXICO

Lovington, N. M.—Mail addressed to the J. E. Hart Grain Co. has been returned "unclaimed."

Clovis, N. M.—D. W. Jones is now a salesman for the Cramer Mill & Elvtr. Co. He was formerly sec'y of the Chamber of Commerce here.

Clayton, N. M.—The C. H. Black Grain Co. has completed a 10,000-bu. studded, steel clad elvtr. on the K. C. M. & O. R. R. It has engine power. The Star Eng. Co. had the contract. This was erroneously reported as being in Texas.

NEW YORK

Oswego, N. Y.—Plans have been drawn for a new 300,000-bu. elvtr. to be built here for the Oswego Milling Co.

Buffalo, N. Y.—L. C. Chase, vice-pres. of the Federal Mlg. & Elvtr. Co., resigned to move to Grafton, where he purchased a mill.

Binghamton, N. Y.—Was experimenting in the grain and feed brokerage business and discontinued Mar. 15.—S. M. Clark, mgr. Southern Tier Feed & Grain Co.

Buffalo, N. Y.—The Globe Grain Co. has increased its capital stock from \$50,000 to \$100,000. Directors are Millard P. Ryley, George A. Sutherland and Frederick W. Moser.

Buffalo, N. Y.—The superintendent of the Dellwood Elvtr. Co. is L. R. Beath. They are building an addition of 700,000-bu. capacity to the plant.—Archer-Daniels Linseed Co., Minneapolis.

Cohoes, N. Y.—The Marshall Flour & Feed Mills, Inc., will construct a three story elvtr. and mill on the Hudson River and will receive shipments by rail and water. The company was recently incorporated for \$200,000.

Buffalo, N. Y.—Dudley M. Irwin, at the bankruptcy proceedings of the Steuben Products Co., Inc., of which he was vice-pres., testified that the Irwin Grain Co. is owned by the bankrupt company. He states that the Irwin Grain Co. has no assets and owes under \$5,000. He sought, thru his counsel, to compromise the claim of the bankrupt company against him for \$40,000.

NEW YORK LETTER.

Charles E. Deming will no longer represent Siglow, Deming & Co. on the Produce Exchange. The assets and liabilities of the company have been taken over by Robt. Siglow Co.

The grain elvtr. of Wm. H. Payne & Son, containing more than 180,000 bus. of wheat, burned Mar. 8, causing a loss of \$100,000. Fire is believed to have started thru friction in one of the legs.

Charles W. Chilcotte, Jr., is now in the grain business with his father, who is representative of the J. Rosenbaum Grain Co. here. It is expected that his application for membership in the exchange will be posted soon.

C. B. Crofton and Henry Goldstein have formed the business of Crofton & Co. with offices in the Produce Exchange. Mr. Crofton was formerly with Lewis, Proctor & Co. and Mr. Goldstein with P. H. Gray & Co.

NORTH DAKOTA

Underwood, N. D.—Mail addressed to the Murphy Gardner Mlg. Co. has been returned marked "out of business."

B. J. Geisel applied for membership in the Board of Trade. He has purchased the membership of A. T. Sawyer, paying \$12,500.

Harry L. Winters purchased the Board of Trade membership of D. F. Piazsek for \$12,500. This is more than \$1,000 above the last previous sale.

The Kansas City Grain Club will hold a meeting soon to hear the report of the com'te appointed some time ago to formulate plans for a grain credit bureau.

The Equity Union Grain Co. has been reorganized. The company will increase its capital stock from \$20,000 to \$100,000 and operate hereafter on its own resources.

Harry C. Stevens, formerly representing the Stevenson Grain Co. on the Board of Trade, is now representing the Equity Union Grain Co., succeeding L. B. McBride, who will return to his home at Norton, Kan. J. J. Knight will also be with the company, which recently increased its capital stock from \$20,000 to \$100,000.

The third annual short course for grain elvtr. men will be offered April 3 to 13 inclusive, according to report of Prof. L. A. Fitz, of the dept. of milling industry of the Kansas State Agricultural College, Manhattan, Kan. It consists of a course in marketing grain, book-keeping, etc., of interest to all elvtr. operators.

Stockholders of the Liberty Milling Co. met recently and voted approval of the sale of the Liberty Mill here to the Washburn-Crosby Milling Co., Minneapolis, for \$400,000. The Liberty Milling Co. was a subsidiary of the Associated Mill & Elvtr. Co., which is now in the hands of receiver J. N. Dolley, who received court approval for the sale. It is said the Washburn-Crosby Mlg. Co. plans to complete and enlarge the mill, having it ready to operate by July 1.

ST. LOUIS LETTER.

A new blackboard has been installed in the Merchants Exchange and in the future, local stock market quotations will be posted.

We have admitted to partnership John J. Murphy and Arthur J. Schulte. We have also taken over the business of the Schulte Grain Co.—Ichtertz & Watson.

The proposal to appropriate \$5,000 to the Grain Dealers National Ass'n for assistance to carry on its educational work, was carried by a vote of 113 to 73 at a special meeting of members of the Merchants Exchange.

The Overland Grain Co., which had its offices at Nashville, Tenn., has been incorporated under the laws of Missouri, with \$50,000 capital stock, and will hereafter have its offices here. J. B. McLemore will direct the company from Nashville.

Thomas W. Carter, pres. of the Carter Commission Co., died Mar. 3 at his home after two days' illness. He was 72 years old. Forty years ago Mr. Carter came to St. Louis and engaged in the grain business with Billingsley and Nanson. Two years later he formed the Fraley-Carter Co. and in 1888 he established the Carter & Bowman Commission Co. He went into business as the Carter Commission Co. ten years later and was active head of that company until his death.

MONTANA

Antelope, Mont.—The Edw. E. Rishoff elvtr. burned here recently. Loss \$40,000.

Melstone, Mont.—My elvtr. is still open, but am doing a feed business only, not buying any wheat. Will reopen about August 15 to buy wheat.—J. H. Jesser, Melstone Grain Co.

Belt, Mont.—The Belt Mill & Elvtr. Co. incorporated with a capital stock of \$40,000, with shares at \$100 each. Incorporators are C. F. Anderson, W. C. Blomquist, J. T. Boug and others.

Livingston, Mont.—W. J. Kaul bot the interest of D. H. Cameron in the Park County Milling Co. He will become sec'y and mgr. of the company, succeeding Mr. Cameron who was mgr.

Three Forks, Mont.—The 250-bbl. mill of the Three Forks Mill & Elvtr. Co. burned Mar. 16. Defective wiring is believed to have been the cause. Loss is \$60,000, partially covered by insurance.

Musselshell, Mont.—Nothing being built or contemplated anywhere near here that we know of. Farmers have an elvtr. here at this time.—Musselshell Merc. Co. (It was reported that an elvtr. would be built here by farmers.)

Stewartsdale, N. D.—Mail addressed to W. A. Clark is returned "unclaimed."

Zeeland, N. D.—Mail addressed to R. K. Hafner is returned marked "moved to Zap, N. D."

Dwight, N. D.—The Farmers Elvtr. Co. closed down on account of poor crop and for that reason I am no longer mgr.—R. L. Kempf.

Minot, N. D.—We built one story to our mill, but not to the elvtr. We did not install new machinery.—The Russell-Miller Milling Co.

Kramer, N. D.—Our company is an independent farmers company and succeeded the Farmers Elvtr. Co.—Lester Strom, mgr. Kramer Equity Elvtr. Co.

Watford City, N. D.—We have received authorization to increase our capital stock from \$10,000 to \$25,000. If crop prospects warrant, we plan to enlarge our elvtr. this summer.—Farmers Co-op. Elvtr. Co., Jos. C. Folven, mgr.

Grand Forks, N. D.—A \$3,000,000 mortgage has been taken on the state owned mill and elevator being constructed here, by the State of North Dakota. Bonds are to be sold on apportionment to cover the amount. This step was taken to obtain funds to continue building operations on the project.

OHIO

Hoytville, O.—The Eagle Grain Co. increased its capital stock from \$25,000 to \$40,000.

Collins, O.—Clark Pelton is now mgr. of the Collins Farmers Elvtr. Co.—Clark Pelton.

Toledo, O.—After an illness of two weeks' duration, J. D. Hulburt is back on the job.

West Liberty, O.—J. L. Mast is the new mgr. of the Mad River Farmers Exchange Elvtr. Co., succeeding D. B. Yoder.

Lockville (Carroll p. o.), O.—We operate the elvtr. formerly run by T. W. King. No other elvtr. here.—Moryar & Light.

McComb, O.—We have purchased the elvtr. of Brumley & Todd here and our firm name will be Bennett Bros.—W. G. Bennett, Bennett Bros.

Toledo, O.—The steamer Penobscot was unloaded recently after waiting two months, having been caught in a big storm and frozen in.

Ingomar, O.—O. Klepinger has installed in his plant a new electric motor drive, 20-ton track scale and is now installing radio apparatus for market information.

Mansfield, O.—T. A. Scott has engaged in the flour and millfeed brokerage business here. He was formerly in the sales department of the Federal Mill & Elvtr. Co.

Tiffin, O.—A. A. Cunningham, pres. of the Sneath-Cunningham Co., has recovered from the operation he recently underwent, but is not active in business as yet.

Greenville, O.—We are increasing our warehouse capacity and installing new machinery for grinding, as we are considerably oversold on present production.—Soyco Mills Co.

Pemberville, O.—Paul Bruning is mgr. of the Pemberville Elvtr. Co. and not of the Freedom Township Elvtr. Co. at Luckey, as previously reported.—Luckey Farmers Exchange Co.

Tiffin, O.—The Farmers Elvtr. & Exchange Co. will hereafter sell gasoline. Special rates will be made to farmers of the company, while regular rates prevail to other customers.

Oakwood, O.—The Nathan Grain Co., Fort Wayne, Ind., has taken over the elevators of the Kimmel Elvtr. Co. here and at Hartsburg, Oakwood p. o. They operate six other elevators.

Clark's Sta. (New Madison p. o.), O.—Bert McCool and Lewis Aukerman, both of Greenville, have taken possession of the elvtr. formerly operated by Richard & Hollinger, having purchased it.

Avery, O.—Plans for refinancing the Avery Grain & Elvtr. Co., with elevators here, Kimball and Huron, were submitted to stockholders at a meeting recently. The company lost \$17,000 in the past year.

Maximo, O.—Farmers in the vicinity of Freeburg and this place are contemplating the erection of an elvtr. at each town. Stock has been sold, but the amount is not sufficient to warrant building as yet.

Montezuma, O.—I bot the interest of Ben Wilker in the firm of Wilker & Klosterman and the company is now known as the Montezuma Grain Co. Geo. Klosterman and myself are proprietors.—F. G. Klosterman, mgr. Montezuma Grain Co.

Cenosa, O.—C. W. Oberhaus is mgr. of the elvtr. I own here. All business done under my name. N. C. Bunte is in charge of the office.—H. G. Dehring.

CINCINNATI LETTER.

W. A. Daniels & Co. have taken offices in the Ingalls Bldg. The company is composed of W. A. Daniels, formerly with the Mutual Commission Co., and Paul Van Leumer and Bert Reynolds, formerly with E. W. Wagner & Co.

Members of the Grain & Hay Exchange will be aided, or suspended, as their business conduct warrants, by a board of governors, who will be so authorized. John De Molet, H. Lee Early and Murray Eisfelder are formulating rules and regulations to govern the board of governors in their actions.

On Mar. 14, John W. Fisher, oldest grain merchant and oldest member of the Chamber of Commerce, celebrated his ninety-third birthday. For 62 years he has been a member of the Chamber of Commerce, and up to three weeks ago, when his physician ordered him to rest up, he had been active daily in the trade.

The lease of the grain inspection department of the Grain and Hay Exchange expires April 1, and to date the Exchange has been unsuccessful in finding one or two rooms suitable for the work. It is desired to secure space in the western section of the city as it is there that the majority of shipments are received.

Elmer Heile, of the Cincinnati Grain & Hay Co., earned the large pasteboard "badge" given him by his associates, when he captured two automobile thieves at Covington, Ky. The thieves had taken a car from in front of his home, and were trying to start it a short distance away. Mr. Heile and a companion went after them, and Mr. Heile held them at the point of his gun until the police arrived.

OKLAHOMA

Ponca City, Okla.—We plan to erect a 70,000 bu. elvtr. here. Sand is being hauled for it now.—Ponca City Mfg. Co.

Oklahoma City, Okla.—The Tuttle Grain Co. has suspended business and abandoned its office in the Grain Exchange.

Albion, Okla.—The Farmers Union Exchange, incorporated last November, has reduced its capital stock from \$10,000 to \$2,500.

Roosevelt, Okla.—The Farmers Co-op. Ass'n has just completed the erection of new coal bins, and is contemplating erecting a new warehouse soon.

Oklahoma City, Okla.—C. B. Cozart was elected president of the Grain Exchange Mar. 21, succeeding Garland White, who recently resigned.

Nardin, Okla.—The Nardin Wheat Growers Ass'n of Nardin incorporated for \$15,000 by Walter B. House, L. H. Norton, E. H. Keeling and L. D. Sawyer.

Sylvian, Okla.—The Farmers Union Co-op. Exchange has been incorporated for \$20,000. Incorporators are J. N. Aldridge and E. M. Hall, and C. B. Curtis of Seminole.

Oakwood, Okla.—The Farmers Co-op. Elvtr. of Oakwood incorporated with a capital stock of \$25,000. Incorporators are John H. Chain, I. A. Marshall and Joe Hainy, all of Oakwood.

Enid, Okla.—We are operating a general wholesale grain office, giving special attention to coarse grains and feeds.—Enid Grain & Feed Co.—(This company incorporated recently.)

Oklahoma City, Okla.—A. B. Rechert recently joined the force of J. H. Lang Grain Co. He was formerly connected with the Edmond Grain Co. at Edmond, as vice-pres. and mgr.

Eddy, Okla.—We will build an elvtr. with 10 to 12,000-bu. capacity. We have incorporated with \$15,000 capital.—The Wheat Growers Co-op. Elvtr. Co., T. A. Holloper, sec'y and treas.

Kingfisher, Okla.—A. H. Smith, mgr. of the Farmers Elvtr. Co., has been appointed receiver for the company, on application of W. F. Cunningham and B. J. Post, stockholders in the company.

Waukomis, Okla.—We have done more than just change our firm name. The Waukomis Grain Co. is a new organization, as the old company failed under the co-operative plan, and we are doing business in their stead, as a stock company, with a paid-up capital of \$20,000. We expect to handle the business in a business-like manner and not as we had to do under the co-operative law.—Fred Atherton, mgr. Waukomis Grain Co.

Blackwell, Okla.—Monroe G. Wright of Paul Valley will erect a 15,000-bu. elvtr. here.

Miami, Okla.—Been some talk around here for some time of farmers entering the grain business for themselves, but nothing definite has been done and do not believe anything will be done.—L. A. Miller, prop. Miami Hay & Grain Co.

Imo (Enid p. o.), Okla.—Charged with embezzlement of the company's funds, six men connected with the Imo Terminal Elvtr. Co. here were recently arrested. The amount is said to be \$80,000. C. R. Kelly, mgr., J. S. Anglin, pres., V. L. Hughes, sec'y, Thomas Braden, J. L. Dennis and W. H. Peckham, directors, are the men accused. Reports show that the company during 1921, placed 89,000 bus. of wheat in its elvtr. and that 7,200 bus. remain there now. Manager Kelly is said to have sold \$40,000 worth and deposited the money in the Imo State Bank which failed a few weeks ago, instead of paying to holders of warehouse receipts. Complaint against the officials was made by Thomas R. Perry, a farmer, who attached a warehouse receipt to his information. This receipt is alleged to have been given him by Kelly for 1,269 bus. of wheat. Capital stock of the company is \$100,000 of which \$50,000 is paid up, and there are 250 stock subscribers principally farmers.

OREGON

Tillamook, Ore.—The Oregon Grain Co. took over the business of the Standard Feed Co.

Portland, Ore.—J. W. Carr has opened a grain brokerage office here. He was formerly mgr. of the Great Falls, Mont., office of the McCaull-Dinsmore Co.

PENNSYLVANIA PHILADELPHIA LETTER.

Horace Kolb has discontinued in the grain and feed business.

After an illness of two weeks' duration from the grippe, Harry W. Koch is again back on the job.

Norwood P. Holland, recently appointed mgr. of E. L. Rogers & Co., died Feb. 21 at the age of 49. Death was due to pneumonia. A widow and son survive him.

Charles W. Kolb, age 58, died Feb. 14 at his home in Collingswood, N. J. He was formerly hay inspector of the Commercial Exchange. His widow survives him.

SOUTH DAKOTA

Henry, S. D.—Mail addressed to the Henry Grain & Potato Warehouse Co. is returned marked "unclaimed."

SOUTHEAST

Richmond, Va.—Herbert Smith was admitted to membership in the Grain Exchange.

Rome, Ga.—H. G. McRae has been succeeded in the grain brokerage business by the Gray-Dyer Co.

Charleston, S. C.—Geo. S. McGrath & Co. have established themselves in business here to handle grain, hay, coal, lumber, etc.

Quitman, Ga.—It will be late in the year before we build our elvtr.—Brooks County Exchange, R. W. Johnson, mgr. (It was reported the company would build.)

Norfolk, Va.—The two companies bidding for the new elvtr. to be built here, are J. Rosenbaum Grain Co. and Rosenbaum Bros. It is expected that arrangements will be made whereby one or the other will lease it.

New Albany, Miss.—The elvtr. of the New Albany Elvtr. Co. owned by L. H. Hall, D. A. Robbins, W. F. Neely, C. N. Craig, J. E. Stroud and E. J. Stephens, burned Mar. 2, with a loss of \$40,000 with about \$20,000 insurance.

Norfolk, Va.—The Port Commission contemplates letting contract early next month for new terminal dock and reinforced concrete grain elvtr. of 750,000 bus. capacity. One-third of this capacity will be in the working house, which will be equipped with 10 legs and modern machinery throughout.

TENNESSEE

Camden, Tenn.—Mail addressed to Dr. B. B. Barnett & Sons has been returned marked "removed."

MEMPHIS LETTER.

Memphis, Tenn.—The Gillespie Grain Co. is a new firm recently established here to handle wholesale flour and feed.

Memphis, Tenn.—The fee for plug inspection of hay by the inspector of the Merchants Exchange, has been reduced from \$3 to \$2 per car.

Memphis, Tenn.—E. R. Gardner, who recently became associated with Walter Browne, has been elected to membership in the Merchants Exchange.

Memphis, Tenn.—Jack Sykes, associated with the Mississippi Elvtr. Co., attempted to pass another automobile in his new car but failed to see a streetcar directly in his path. The resultant crash catapulted him thru the windshield, rendering him unconscious. He was not fatally injured.

NASHVILLE LETTER.

The sale of the J. A. & O. L. Jones Mill & Elvtr. Co. property will be held Mar. 25. It will go by auction to the highest bidder. The Fourth & First National Bank is the administrator of the estate.

The Overland Grain Co., which had its offices here, has incorporated for \$50,000 under Missouri laws and will hereafter have its offices at St. Louis. J. B. McLemore will direct the company from Nashville.

When he fell from the sixth floor of the Chamber of Commerce, Joseph H. Judd, pres. of the Mero Mills, fractured his skull, but it is thought he has some chance for recovery. Wires, about 25 feet above the street level, broke his fall.

TEXAS

Barry, Tex.—Mail addressed to Tekell Bros. has been returned marked "gone."

Dallas, Tex.—Mail addressed to the Lawther Grain Co. has been returned marked "unclaimed."

Amarillo, Tex.—The annual convention of the Panhandle Grain Dealers Ass'n will be held here May 9.—U. S. Strader, sec'y.

Gonzales, Tex.—The elvtr. of the Shuler Grain & Elvtr. Co. burned Mar. 3. The building was valued at \$9,000, insured \$6,000.

Longview, Tex.—We are not in the elvtr. business. Ours is a jobbing local business, selling some carlots.—Nelson Grain Co.

Fort Worth, Tex.—The annual convention of the Texas Grain Dealers Ass'n will be held here May 26 and 27.—H. B. Dorsey, sec'y.

Clayton, Tex.—The report that the C. H. Black Grain Co. had completed an elvtr. here is wrong. They did complete an elvtr. at Clayton, N. M.

Plainview, Tex.—I am mgr. of the Plainview Equity Union Exchange.—B. O. Cloud. (This company recently bot the elvtr. here of B. F. Yearwood.)

Mineola, Tex.—The Rains County Mill & Elvtr. Co. incorporated with a capital stock of \$40,000. Incorporators are D. N. Steed, H. O. Rogers and Albert Maberry.

Huntoon, Tex.—M. A. Shuler is mgr. of the Huntoon Equity Union Exchange which recently completed a new 15,000-bu. elvtr.—O. A. Cook, Huntoon Equity Union Exchange.

Seguin, Tex.—R. H. King, formerly with the Gladney Milling Co. of Sherman, has succeeded T. E. Roberts as superintendent and head miller for the Seguin Milling & Power Co.

Happy, Tex.—The Chapman Milling Co. of Sherman bot the elvtr. here from Thompson. Wilson & Co. last August and retained me as mgr.—E. D. Goodknight, mgr. Chapman Milling Co.

Longview, Tex.—I bot the interest of Ed Nelson in the Farmers & Merchants Grain Co., and he opened a wholesale and retail feed store under the name of Nelson Grain Co.—E. B. Remsert, Farmers & Merchants Grain Co.

Wichita Falls, Tex.—The old plant of the Wichita Mill & Elvtr. Co. burned Mar. 5 with a loss of \$50,000. Two grain houses were destroyed and one of the steel bins was so badly warped that it will have to be destroyed. The plants had not been used except as an auxiliary to the new \$1,000,000 plant of the company. The fire is believed to have been due to the activity of some small boys who had been playing around the elvtr. in the afternoon. Insurance partially covered the loss.

San Antonio, Tex.—The Pioneer Flour Mills Co. has let contract to the Burrell Eng. & Constr. Co. for an 85,000-bu. reinforced concrete elvtr. It will be 44x44 ft. and 196 ft. high. Equipment will be 12 electric motors, 2000-bu. hopper scale, Invincible Cleaner, feeders and conveyors, Mayo Distributor and 2 legs, space being reserved for 2 legs to be installed later. The elvtr. will be completed in July.

UTAH

Ogden, Utah.—The plant of the Albers Bros. Mlg. Co. which has been closed for several months, resumed operations and is expected to operate at full schedule soon. J. H. Hollister is mgr.

WASHINGTON

Kirkland, Wash.—The Rose Hill Grain & Feed Co. was opened Mar. 1, by J. Fisher.

Thorp, Wash.—The flour mill recently purchased here by the Helm Grain & Mlg. Co. is being overhauled.

Seattle, Wash.—James A. Ayton, grain inspector for Balfour, Guthrie & Co., died at his desk recently. His widow and two children survive him.

WISCONSIN

Beaver Dam, Wis.—I will be building new coal sheds and wood yard soon.—L. A. Peachey.

Paskin, Wis.—Mail addressed to the Farmers Grain Co. is returned marked "sold out and deceased."

Johnson Creek, Wis.—Mail addressed to H. Wollering has been returned marked "deceased."

Withee, Wis.—The Farmers Produce & Exchange Co. is out of business, having sold to John Christensen.

Biramwood, Wis.—We sold our elvtr. here last summer to Geo. L. Hooker.—C. E. Hooker, Northern Milling Co., Wausau.

LaCrosse, Wis.—Mail addressed to the Listman Mills, property of the Kansas Flour Mills Co., has been returned marked "mill closed."

Milton, Wis.—T. A. Saunders & Son have bot the elvtr. and feed mill of E. L. Barnes. Mr. Barnes will remain in charge of the feed mill.

Appleton, Wis.—Marie Ziegenhagen has resigned her position as sec'y and treas. of Willy & Co. here. She was one of the founders of the company.

Slinger, Wis.—We are not taking over the Armour Grain Co. elvtr. here.—Slinger Lbr. Co., Oscar Thiel, sec'y. (It was reported that they were considering taking it over.)

Eau Claire, Wis.—H. F. Wright, mgr. of the Wisconsin Mlg. & Grain Co., has resigned to go to Detroit, Mich., where he will be sales mgr. for David Stott Flour Mills, Inc.

Eau Claire, Wis.—The Eau Claire Co-op. Shipping Ass'n incorporated with a capital stock of \$1,000, to deal in grain, produce, flour, feed, livestock, etc. Incorporators are O. O. Leo, R. H. Holbrook and C. P. Moses.

Sun Prairie, Wis.—Chase & Sons, whose elvtr. burned some time ago, will erect a new elvtr. and feed mill to cost from \$15,000 to \$20,000. Work will start at once, so elvtr. may be complete in time for new crop.

Ladysmith, Wis.—G. C. Nielson, who disposed of his elvtr. and feed milling business at Withee and Thorp last year, has leased part of the Morgan Produce Co.'s warehouses here and will be in the feed mill and elevator business. He is building an addition to house the feed mill.

Wausau, Wis.—When the Dodge-Hooker Mills merged with the Northern Milling Co. the Northern Milling Co. took over their elvtrs. at Shawano, Clintonville, Oconto Falls, Sparta, and at Lindsey, the latter being but a warehouse where we sell only.—C. E. Hooker, Northern Milling Co.

MILWAUKEE LETTER.

At the monthly meeting of the board of directors of the Chamber of Commerce, action was taken opposing changes in wheat grades as outlined by the Sec'y of Agriculture.

Duhne & Co. incorporated to deal in grain, with a capital of \$20,000 preferred stock and 2,000 shares common, without par. Incorporators are Francis Duhne, Jr., Erwin John and Edna Nyff.

J. B. Oliver, one of the oldest and best known grain men here at one time, died at the age of 82.

The Chamber of Commerce caucus nominated the following candidates Mar. 18: For pres. H. H. Peterson, for 1st vice-pres. A. R. Taylor, for 2nd vice-pres. A. R. Templeton, for sec'y-treas. H. A. Plumb.

Geo. H. Barber, who retired from the Brown Grain Co. about five years ago, is now traveling the northwest states for the Moering Grain Co., which firm was succeeded Mar. 1, by the Froedtert Grain & Malting Co.

WYOMING

Gillette, Wyo.—A. R. Smith has leased his elvtr. to Mr. Martin for the coming year.—Jasper Brown, sec'y Campbell Co. Farmers Grain Co.

Laramie, Wyo.—The Hylton Flour Mills Co. is negotiating for the plant of the Cheyenne Milling Co. here, which was recently partially destroyed by fire.

TWO MEMBERS of the New York Stock Exchange on Mar. 23 were suspended for one year, Archibald B. Boyd and Percy R. Goepel, under a resolution of the governing board prohibiting dealing with outside concerns or taking the side of the market opposite to that of their customers in trades made for their own account.

C. E. Williams Re-Elected President of Denver Grain Exchange.

The re-election of C. E. Williams to the presidency of the Denver Grain Exchange Ass'n is a fitting recognition of his successful administration during the past year. Mr. Williams is manager of the Denver Elevator Co. and the Crescent Flour Mills. His portrait is given herewith.

The steady increase in the volume of grain handled thru the Denver Grain Exchange and the several constructive moves made during the fiscal year ending Feb. 28, 1922, have broadened the market and increased the value of memberships over \$100 per share, book value. The Exchange is self-supporting due to wise and careful management and since its organization it has not been necessary to levy an assessment against the members.

The total in-inspection of grain including flax, maize and mixed grains during the fiscal year just closed was 7,990 cars, against 7,687, 7,391, and 6,591 for the three fiscal years preceding, respectively. Out-inspections were 2,088 cars for the fiscal year ending Feb. 28, against 1,716 for the fiscal year preceding.



C. E. Williams, Denver, Colo., Re-elected Pres. Grain Exchange.

Grain Carriers

NAVIGATION on the Great Lakes is expected to open between Apr. 1 and Apr. 15.

A FULL cargo of corn, bound from New Orleans to Denmark, sank recently in the Atlantic Ocean, according to a report given out Mar. 3.

CARS loaded with revenue freight during the week ended Mar. 4 increased 67,969 over the previous week. The increase in the number loaded with grain was 2,791.

THE National Foreign Trade Council is urging American ship owners and operators to issue, as soon as possible, bills of lading drawn in conformity with the Hague Rules, 1921.

A CONFERENCE was recently held by the Interstate Commerce Commission and representatives of state railway commissions to discuss their respective jurisdictions over freight rate matters.

TESTIMONY will be heard by the Interstate Commerce Commission Apr. 24 in connection with the plan for consolidating the railroads, this hearing having to do with the southeastern region only. Other regions no doubt will be taken up later.

AN ORDER has been issued by the United States Shipping Board demanding that the Chicago, Milwaukee & St. Paul and Great Northern railways cancel, by July 1, all contracts with Japanese steamship lines concerning preferential rates.

THE INTERPRETATION placed on C. B. & Q. tariffs by the Kansas City Board of Trade Transportation Dep't to the effect that a rate of 16c was made on wheat from Kansas City to Chicago has been upheld by the Interstate Commerce Commission.

REGIONAL conferences between representatives of railroad employes unions and the carriers have come to an end, because, in the language of a statement issued by two of the brotherhood representatives, "mutually satisfactory agreement could not be reached."

AT A MEETING of the New York State Industrial Traffic League, held in Buffalo Mar. 9 and 10, a resolution was adopted condemning the St. Lawrence Ship Channel project. The League also pledged itself to do all in its power to aid in development of the state barge canal.

NEW reshipping rates will become effective Apr. 1 on grain, grain products and by products from Chicago to Ohio River Crossings destined to Southeastern and Carolina territory points when originating in Trans-Mississippi territory, Northwestern territory, Northern Iowa territory and Illinois.

PETITION has been filed with the Interstate Commerce Commission by the Omaha Grain Exchange asking the suspension of tariffs of various carriers advancing the rates on grain and grain products to New Orleans and other Mississippi Valley points. The proposed increases are from 4c to 12c per cwt.

A SUIT in equity has been started in federal court at New York against the government by about 100 railroads in connection with a recent order of the Interstate Commerce Commission fixing rates. The carriers allege that the order is arbitrary and without foundation, and that the Commission has exceeded its jurisdiction.

RATES on corn and oats from Ashland, Lexington, McLean, Rutland, Stanford and Wenona, Ill., to Memphis, Tenn., were found to have been unreasonable on shipments made between June 25, 1918, and Dec. 30, 1919, in a recent decision of the Interstate Commerce Commission in the complaint of Clarke-Burkle & Co. and other Memphis grain dealers against the Director General of Railroads. The rates were found unreasonable to the extent that they exceeded the aggregates of the intermediate rates contemporaneously in effect to and from East St. Louis, but reparation was de-

nied because it was not shown the complainants had paid the rates complained of.

SUIT has been filed by the Kaw Milling Co. and the Forbes Milling Co., of Topeka, Kan., against the Rock Island and the Director General of Railroads asking for damages suffered in the transportation of grain during the period of government control.

THE Cincinnati Chamber of Commerce has begun a campaign to raise a fund of \$50,000 to put over the Toledo-Cincinnati barge canal, on the assumption that the ownership of the property is vested in the United States and that local support can be assured for the canal.

INFORMATION is being compiled by the Transportation Bureau of the Kansas City Board of Trade on the quantity of grain in store in that market carrying billing that is nearing the 12-month expiration limit. It is the intention to attempt to obtain an extension of the time limit on such billing.

THE transportation commissioner of the Kansas City Board of Trade, W. R. Scott, will attend the rate hearing at Galveston, which is to begin Mar. 27 for the purpose of considering Galveston's request for a lower rate on grain from most of the Southwest than corresponding rates to New Orleans.

A DECISION was rendered by the U. S. Supreme Court Mar. 13 in the case of the state of Texas against the Eastern Texas R. R. Co., et al., holding that the Transportation Act of 1920 does not confer on the Interstate Commerce Commission authority to suspend the intrastate operations of the Eastern Texas R. R. Co.

NEW INDIVIDUAL and joint rates on grain and grain products from Illinois points to Gulf ports for export, which were to have become effective Mar. 7, have been ordered suspended by the Interstate Commerce Commission until July 3, pending investigation. The tariffs were filed by the Chicago & Alton and the Illinois Traction System.

A FURTHER inquiry into grain rates has been instituted by the Interstate Commerce Commission in re-opening the western grain rate case No. 11,703 on account of rates from points west of the Illinois River and the line of the A. T. & S. Fe being lower than from points south and east. The Illinois Commerce Commission petitioned for the re-opening.

THE ORDER modifying the reduction in rates from Kansas City, Minneapolis, Omaha and St. Louis to New Orleans and Mississippi Valley points is to be protested against by grain shippers at Kansas City and by shippers in other markets. The modification permits grain to move from country points to the south on a lower rate than from terminal markets.

INFORMATION on thru export bills of lading is to be maintained at the chief shipping points of the country, and a list of places where the information is available is contained in Foreign Commerce Order No. 2 of the Interstate Commerce Commission, obtainable from the Sup't of Documents, Washington, at a nominal price. Thru bills of lading will be issued at the places named.

A RULING of the Interstate Commerce Commission dated Mar. 8 reiterates the statement that it is the duty of carriers to exhaust their legal remedies to collect undercharges from the party legally responsible therefor, but it states that the courts and not the Commission must determine in any given case whether the consignor or the consignee is legally liable for the undercharge.

A HEARING was held at Chicago Mar. 10 by Examiner John T. Money of the I. C. C. on the complaint by the Chicago Board of Trade against the clause added to rule 115 of supplement No. 8 of Kelly's I. C. C. 1014, that "Deficiencies in weight of inbound or outbound shipments on account of tariff minimum are not entitled to transit privileges and would be subject to local rates to and from transit points." J. S. Brown, transportation commissioner, stated that discrimination would arise against the transit point because the deficiency

would be charged the full local rate to the transit point while non-transited grain would take the thru commodity rate.

CHARGES on coal from mines in the Springfield, Ill., district to stations in Illinois, Indiana, Iowa and Missouri, shipped during the period of federal control of railroads, were found not unreasonable in a decision rendered by the Interstate Commerce Commission in the complaint of the Citizens Coal Co., of Springfield, against the Illinois Central and the Director General.

TRUNK LINE railroads associated with the Missouri & North Arkansas railway in handling thru shipments have been ordered by the Interstate Commerce Commission to increase the proportion of joint rates accruing to the M. & N. A. to the extent necessary to permit that line to resume operation. The M. & N. A. suspended last year, the receiver claiming it was impossible to continue with existing rates.

A WHEAT, known as Blackhull, has been developed in Reno, Harvey and Sedgwick Counties, Kan., from three heads found in a field in 1912. It is now being tested by the Kansas Agricultural College, but no report has been made on it. It is described as a hard wheat, highly disease resistant, having a stiff straw and standing up well on rich ground where other varieties go down. It is not very winter hardy.

NO ACTION has been taken by the Kansas City Board of Trade on the proposal to re-establish the prewar differential of 5c per cwt. in favor of Galveston as compared with Baltimore on export rates on grain from Kansas City and other western points. The present differential is 8c, and complaints have been filed with the Interstate Commerce Commission by several markets asking that the old differential be restored.

RATES on grain and grain products from St. Louis, Cairo and Thebes, Ill., to Little Rock, Pine Bluff and Fort Smith, Ark., and Memphis, Tenn., were held to be unduly preferential, and to constitute discrimination against other cities in Arkansas, in a decision rendered by the Interstate Commerce Commission Mar. 16. Carriers were ordered to make the rates reasonable by slightly increasing the rates to the cities named and by decreasing them to other Arkansas points.

TWO FACTORS determine the relative susceptibility of different varieties of wheat to smut infection, according to an Italian scientist who has been experimenting with wheat to learn its behavior toward smut and similar diseases. The two factors are the intrinsic resistance of the variety and the germinating energy of the seed. Each factor is independent of the other; and wheat of a highly resistant variety may resist infection altho the germinating power of the seed from which it came may have been low.

LOWER FREIGHT rates on seeds have been asked for by representatives of the seed industry who appeared before the Interstate Commerce Commission at its recent hearing on the general rate situation. J. George Mann, traffic manager for Northrup, King & Co., who presented the case to the Commission, asked for recognition of agricultural seeds as a basic commodity, and as such entitled to consideration in the recent reduction in grain rates, altho he pointed out that certain seeds were not given the benefit of the reductions.

RESHIPING rates from Chicago, Cairo and St. Louis to Memphis, Tenn., and New Orleans, La., domestic, have been readjusted, effective Apr. 1. New reshipping rates from St. Louis on grain and grain products will be 12½c per cwt. to Memphis and 31½c to New Orleans. Reshipping rates from Cairo are 3c less than those from St. Louis. From Chicago the new rates are 19½c to Memphis and 38½c to New Orleans, subject to minimum thru rate from point of origin to destination equal to 10½c on wheat and 9c on coarse grains higher than the reshipping rate from Chicago. Thru rates from points west of the Mississippi River are revised on the basis of the combination via St. Louis or Cairo.

Shall Head Pulleys Be Lagged?

A number of letters from elevator builders, dealing with the subject of the lagging of head pulleys, were published on pages 320 and 321 of the Journal for Mar. 10.

Additional opinions of builders who specialize in the construction of grain handling plants are given below:

Should Always Be Lagged.

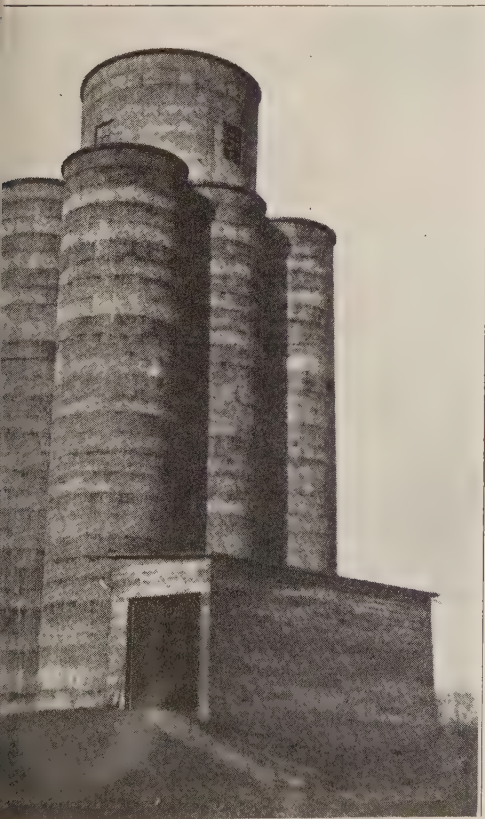
We do not believe that an unlagged head pulley should ever be used except, perhaps, on the very lightest work. Where we have used properly lagged pulleys we do not know that a choke has ever caused the belt to slip, altho we have had material to catch in the leg and tear buckets off by the dozen. In one case, a 10x5 belt was torn in two, but we have never heard of a fire caused by a lagged head pulley. We know that large V-shaped buckets cannot be placed close centers with any size pulley and give results without lagging the head pulley.

We believe there is ten times the fire hazard with unlagged pulleys because the belt will slip when it is only half choked. Then it will run to the side of the pulley and have a tendency to fire the wood housing. We believe that a leg with the proper size head pulley, properly lagged, will break any belt before it will slip. We use lagged pulleys in every case where the elevation is over 65 ft., and generally when it is more than 60 ft.

Little Difference in Fire Hazard.

Covering a pulley used with slow speed belts adds to its adhesive capacity about one-third. I never use a covered pulley unless I find that the belt slips, then I cover the pulley as it is not always advisable to put in larger diameter pulleys. The speed of leg belts is slow, from 200 to 750 ft. per minute, and the larger the pulley the more frictional space there is and the faster the speed, therefore the larger the pulley the better, but in building an elevator the matter of economy must be considered as large pulleys require more room.

There is very little more fire danger from lagged pulleys than from unlagged. In fact, when the belt begins to slip the additional warmth creates more adhesive tendency and sometimes the slipping will stop, but if there is much slippage there will be danger of fire in either case. All the legs should be provided with friction clutches just able to carry the load, then when there is a choke the clutch will slip.



Reinforced Concrete Elevator of Nye Schneider Jenks Co. at Modale, Ia.

A good rule for head pulley sizes is as follows: For 40 ft. lift, 30-in. diameter pulley; for 60-ft. lift, 36-in. pulley; for 75-ft. lift, 48-in. pulley, belt 1 in. wider than buckets in each of these; for 100-ft. lift, 60-in. pulley, belt 2 in. wider than buckets; 150-ft. lift, 72-in. pulley, belt 2 in. wider than buckets; 200-ft. lift, 84-in. pulley, belt 2 in. wider than buckets.

As Necessary as Brake Lining.

I have found it as necessary to use lagged iron head pulleys in elevator legs 75 ft. high and more as it is to have lagging or brake lining on hoisting drums or brake bands of automobiles, for the reason that the bare polished iron will slip at least friction—friction is the ability of the belt to stick to the head pulley and not slip.

Slipping causes heat and in case of the slipping of a loaded belt the result is a choke. Then the belt is wedged tight and the head pulley will slip until sufficient heat to do damage is generated. If you can prevent the slip you also prevent the choke.

I don't believe an overloaded leg ever caused a fire as long as the belt was "sticking to" the head pulley and traveling with it at the same rim speed. Other damage might result, such as tearing off the buckets, if some obstruction is placed in the boot, head or leg, or if the up leg becomes filled with grain a considerable distance from the boot. The head pulley and belt then would function properly until the load became so great as to overcome the power itself or cause the belt drive or rope drive to slip. The slipping and consequent generation of heat would take place outside the leg and would seldom amount to anything. I would rather have a leg belt tear in two than to burn in two because the pulley, by slipping, generated enough heat to do that thing.

THE BREAKING of seals of box cars containing interstate or foreign shipments will be punished more easily if H. R. 10768 is enacted into law. This will amend the act of Feb. 13, 1913, so as to make the way-bill of a shipment prima facie evidence of whether the freight is an interstate or foreign shipment. Any legislation which will check the stealing from cars will receive the hearty approval of shippers.

Up-to-Date Concrete Elevator at Modale, Ia.

The attractive reinforced concrete elevator shown in the photograph reproduced herewith has recently been completed at Modale, Ia., by the Nye Schneider Jenks Co. to replace the wood plant which burned Sept. 4, 1921.

It consists of 6 cylindrical tanks, surmounted by a cylindrical cupola. Each tank is 66 ft. high and the inside diameters are 12 ft. Bin walls are 6 in. thick. The cupola is 20 ft. in diameter and 16 ft. high.

Three of the tanks are used as single bins, two are divided in their middle by partitions to form 4 bins and 2 interstice bins are utilized. This gives a total of 9 bins, ranging in capacity from 2,000 bus. to 6,000 bus. One tank is used as a work room and for leg space. The two 6,000-bu. bins and one of 3,500 bus. capacity are used as shipping bins.

The plant is equipped with one steel leg having a 48-in. head pulley and using a 13-in. belt with 12-in. buckets attached 11-in. centers. The head discharges into a Hall Signaling Distributor. This leg handles 2,000 bus. per hour, and it has not yet been possible to dump grain rapidly enough to get ahead of the leg.

Power for the operation of the plant is furnished by a 15-h.p. electric motor located in the cupola. Other equipment includes a Kewanee All-Steel Truck and Wagon Dump which serves three sinks, and a 150-bu. Fairbanks Steel Hopper Scale.

The entire plant contains less than 500 ft. of lumber, so it is not likely to burn. However the lumber will increase the cost of insurance. It was designed by P. A. Peterson, chief engineer for the Nye Schneider Jenks Co., and built by M. B. Lawrence, another employe of the company.

In 1921, according to S. C. Beebe, agent for the company at Modale, the town shipped 463,196 bus. of corn, 160,950 bus. of wheat and 65,250 bus. of oats.

Ground Rentals for Elevator Sites Being Increased.

COLORADO.

\$12 for Sewer Pipe Under Track.

Peyton, Colo.—Our present rental for elevator site is \$15 a year, besides which we pay \$12 for pipe line under track, being a sewer put in and maintained by the elevator company.—Farmers Elevator Co.

ILLINOIS.

Taking Up Lease with State Commission.

Foosland, Ill.—I am taking up the lease business with the Commission, as the Illinois Central is trying to stick me for \$75 per year on a country elevator and coal shed. Nothing else there.—Alton De Long.

Exorbitant Charge for "Trackage."

Arlington, Ill.—We are not complaining about the lease for our elevator site, which at present is only \$10 a year; but we are objecting to a charge the P. C. & St. L. is trying to get us to pay for "trackage," as they call it.

They want us to pay \$94.25 a year in advance for a track they have bridge cars and bad order cars setting on three-fourths of the time. They send us a statement every month. In 1920 when we went four straight weeks thru harvest without a car they were bold enough to ask us to pay it. After freight rates went up we got a few cars.—Hittle Grain Co.

INDIANA.

Charge \$37 a Year.

Taylorville, Ind.—I have a coal shed on the Pennsylvania switch here that costs me \$12 a year for the lease of land and \$25 a year for switching privileges.—Frank Richards.

MINNESOTA.

Thinks \$18 Reasonable.

Triumph, Minn.—I pay \$18 for lease here and I think this is pretty reasonable, tho I know some roads are charging only \$10.—Matson Grain Co., F. W. Matson.

MONTANA.

Pay \$27.50.

Broadview, Mont.—For our house on the Great Northern we pay \$12.50, \$7.50 for the flour house site and the same for the coal site.—Farmers Elevator Co.

NEBRASKA.

Got a Reduction.

Dannebrog, Neb.—On the C., B. & Q. we pay \$15 and on the U. P. \$11 a year. We had been paying \$16 on the U. P.—Farmers Grain & Supply Co.

OHIO.

No Advance in 5 Years.

Litchfield, O.—We have 200 ft. of land leased from the A. C. & Y. R. R., and they have made no advances during the last 5 years.—Litchfield Exchange Co.

\$5 for Warehouse Site.

Coolville, O.—We have a 20x30 warehouse on the B. & O. S. W. R. R. land and pay \$5 a year. We have had no advance in last 5 years.—Coolville Mill Co.

No Increase in Ten Years.

New Lexington, O.—I have a strip of land 40 ft. long and 5 ft. wide that the elevator stands on, for which the T. & O. C. R. R. charges me \$10 per year. I have paid that amount for 10 years. The siding is all on the railroad company's ground.—H. A. Lowe.

Settled at 25 Per Cent Increase.

Greenwich, O.—We had some trouble with the B. & O., on which we have one of our warehouses, but settled with 25 per cent increase in rental.—Farmers Elevator Co.

Raised \$45 to \$120.

Blanchester, O.—Our London plant is located on the C., C. & St. L., and prior to March 1, 1921, we paid \$75 per year rental for land, on which our barn is located. After March 1, 1921, the rental was \$65 per year. We have no record of how far back the \$75 period extended.

In connection with our branch at Lynchburg, Ohio, which is located on the B. & O., we have been subjected to one advance from \$45 to \$120.—The Dewey Bros. Co.

\$1 a Year for Siding.

Somerset, O.—We built and own our siding which is on the right of way but we have no buildings on the right of way. Our contract calls for only \$1 a year for the siding, which is 345 feet in length. We feel that we shall not be imposed upon by the railroad people in the way that it seems many others are.—Farmers Elevator Co.

Charge \$15 a Year for Scale House.

New Vienna, O.—We own a scale house on the railroad property for which they charge us \$15 a year. We own our buildings and tracks.—New Vienna Grain & Produce Co.

WISCONSIN.

Nominal Rental for Many Years.

Fremont, Wis.—I have paid \$5 rental for many years, but I am using only 1 ft. wide by 40 ft. in length.—Geo. H. Dobbins.

Feedstuffs

WAHOO, NEB.—Chas. H. Johnson has entered the feed and seed business.

FERGUS FALLS, MINN.—O. J. Fessen contemplates erecting a \$25,000 feed mill.

RICHMOND, VA.—W. F. Richardson, Jr., & Co. are adding a feed mill at their plant.

BEATRICE, NEB.—The seed business of E. M. Gashaw has been bought by E. M. Essex.

DAYTON, O.—The Powers-Holbert Feed Co. will erect a new building to cost about \$25,000.

DECATUR, GA.—A mill for the manufacture of dairy feed will be built by Wiley S. Ansley.

MANZANOLA, COLO.—The alfalfa meal mill of the Beaty Mercantile Co. will be reopened soon.

KANSAS CITY, Mo.—The General Commission Co. will install a 75-ton feed grinding plant.

PEORIA, ILL.—The local plant of the U. S. Food Products Corporation is not now in operation.

GOVERNEUR, N. Y.—D. F. Sprague has leased the feed mill of C. L. Wallace and will operate it.

NOWATA, OKLA.—L. E. Morrison, of Cabeen, Mo., has bought the feed and seed business of M. F. Wilkinson.

STOUGHTON, WIS.—Thos. Joitel has bought an interest in the feed and milling business of C. A. Tofte & Son.

DUNDAS, ONT.—The Caldwell Feed & Milling Co., Ltd., has been incorporated with capital stock of \$150,000.

SALEM, O.—The Purity Feed Co. has been organized by O. W. and H. E. Rechsteiner and others. Capital stock is \$10,000.

WOLCOTTVILLE, IND.—We are installing a commercial feed plant in our mill here.—City Milling Co., Wolcottville and Kendallville.

NEW ALBANY, IND.—N. V. Trautman has bought the business of the National Seed Products Co., and will conduct a feed business.

BALTIMORE, MD.—The Blamberg-Bixler Co. has installed a Scientific Attrition Mill for the manufacture of mixed poultry and stock feeds.

CINCINNATI, O.—The Ubiko Milling Co. has completed an addition to its plant for the manufacture of scratch feeds and molasses feeds.

PETOSKEY, MICH.—Frank Gruler & Sons have bought the feed business of D. C. Osborne, and will consolidate the business with their own.

FEWER feed mills would be running in old tumble down shacks if the grain elevator operators would recognize the opportunity and install a modern mill first.

ONTARIO, CAL.—The Ontario Feed & Fuel Co. will erect a concrete building 70x225 ft., to cost \$30,000. Feed grinding machinery, to have a capacity of 3 tons per day, will be installed.

EL RENO, OKLA.—The warehouse and office of the N. B. Waldo Feed & Milling Co. burned recently. The loss was about \$15,000, and included 10 cars of hay and many grain bags.

HAMILTON, O.—Dissolution of the Dixie Flour, Feed & Fuel Co. has been asked for in a petition filed in court recently by certain directors of the company, who say it is for the best interest of the stockholders.

CEDAR RAPIDS, IA.—An overheated bearing in the elevator of J. Butler & Co., feed manufacturers, set fire to woodwork on the second floor Mar. 4 and the top of the plant was nearly burned off. A quantity of feed was destroyed.

A TRAVELING feed store is being operated by Herbert J. Jones, of Waltham, Mass., who built a body on an auto truck for displaying various varieties of feeds he handles. The truck also provides room for a dozen laying

hens, and there are sleeping quarters for two men. The truck is to be used in giving demonstrations at agricultural fairs and expositions.

AN AMENDMENT to the rules of the Milwaukee Chamber of Commerce, approved by the members at a recent election, authorizes adoption of the uniform feed rules now in use by practically all organizations dealing with the handling of feedstuffs.

MILWAUKEE, WIS.—I have established myself in the business of manufacturing poultry feeds, and the distribution of mill feeds, grain, etc. My plant is located at Jefferson Junction, and will have a capacity of 100 tons of feed per day. I was formerly connected with the Ladish Milling Co.—H. H. Ladish.

Spring Housecleaning.

In truth we live within this Temple made by the most High;

From your distinctive dwelling then remove the whine, the sting, the sigh.

Remove the whine; 'Tis self-indulgent just to pine.

Remove the sting;

A honey-laden bee can be a baneful thing.

Take time to love

The ones beneath, beside you and above.

Each one has needs,

Perchance your love may prompt to tender deeds.

Take time to eulogize;

You may awaken powers the world shall prize.

The things we think thru all our days,

Reveal themselves in unsuspected ways.

Remove the sting;

In every tone a kindness bring.

Remove the whine;

And let your spirits sing and shine.

Take time to air and sun

Your dwelling every day

With airy laughter and with sunny play.

Then cast aside the wornout sigh, the slight, the sting.

O! don't forget your housecleaning this spring.

—Myrtle Dean Clark.

THE SUPPORT of the agricultural bloc has been given to a bill introduced by Senator Ladd, of North Dakota, to restore to state railroad commissions full authority over intrastate rates.

Magnetic Separators in Feed Milling

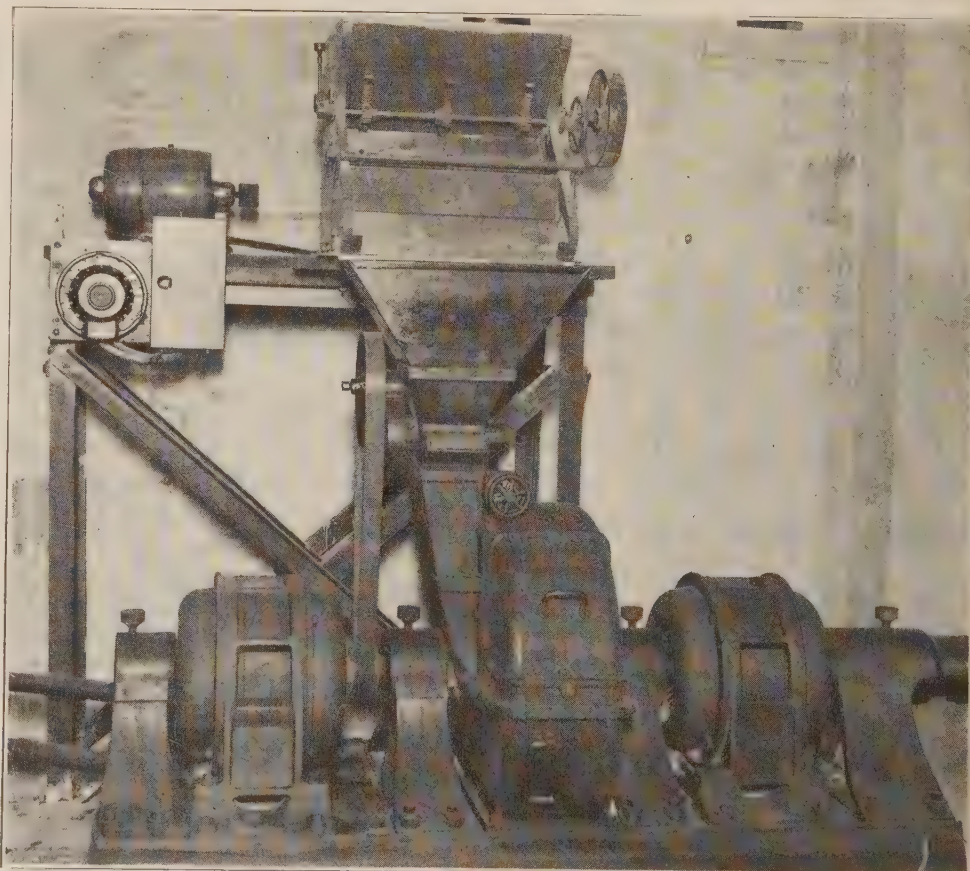
Foreign matter found in grain includes nearly every imaginable substance, but most of the damage is done by iron in some form.

Spikes, nails, screws, tacks, washers, bolts and nuts are commonly found in the grain, while hammers, axe heads, wrenches, cold chisels, horse-shoes, bits of wire, iron match safes, and railroad coupling pins are occasional unwelcome ingredients of the grist.

"Throwing a monkey-wrench into the machinery" is more than a mere figure of speech to the operator of a cereal milling plant not equipped to separate destructive metal from the material to be ground into feed. Iron going between the rolls of a mill or between the disks of an attrition grinder is ruinous to the equipment, demanding a shut-down for repairs, which are often costly and never profitable. Even a short piece of steel wire going thru a roller mill can strike a spark, to ignite the dust nearly always found within the mill housing, and thus start a fire or an explosion. Some of the heaviest fire losses in the cereal industry are known to have been caused by sparks in the grinding equipment. Sparks in an attrition mill on the second floor of the feed mill of Smith, Parry & Co., at Milwaukee, Wis., started a fire followed by a terrific explosion that wrecked the plant on May 20, 1919, doing damage estimated at \$100,000 and killing three men.

It is not even to the advantage of the feed manufacturer to have sharp pieces of metal pass thru his mill without damaging the machinery. An Indiana farmer for a time fed his hogs most successfully with a prepared feed, when suddenly his stock began dying off from some strange disease. A veterinarian called in was puzzled until an autopsy disclosed many bits of fine sharp iron lodged in and permanently attached to the lining of the stomach and intestines, having been eaten with the ready mixed hog feed. The manufacturer of the feed was called to account, to his cost.

A repetition of the explosion in the new



Ding's Magnetic Separator Removing Iron from Grain on Way to Feed Mill of Parry Products Co., Milwaukee, Wis.

plant of the Parry Products Co. has been presented by the equipment of the grinding rolls with Dings Magnetic Separators to remove all iron. One of the installations is shown in the engraving herewith. Another feed mill plant at Milwaukee, that of the Chas. A. Krause Milling Co., has been furnished with eight of the Dings Magnetic Separators. One of them is 48 inches wide and handles as high as 1,000 bus. an hour to a corn cleaner.

The earlier type of magnetic separators, many of which are still used, is built up of a number of permanent magnets. The Dings Magnetic Separator, however, is energized by an electric current, and is much more powerful in its action to remove iron, just as electro magnets greatly exceed the attractive force of permanent magnets. The electromagnetic separator is sufficiently powerful to extract a piece of pig iron or even an anvil weighing 200 pounds. In the old style separator several permanent magnets are assembled side by side, each magnet having an attractive force of 25 pounds. The "natural" magnets have difficulty in picking up round iron balls, which cannot be handled except by the powerful electromagnets. When an object of iron presents a large, even surface and with light weight it is readily caught and eliminated, while a piece of comparatively heavy weight for the possible amount of area of contact available presents greater difficulty in extraction.

Iron, fortunately, is always heavier than the conveyed material and seeks the bottom of the mass, thus bringing it nearer to the magnet. The vibration and agitation of the supporting rollers of the conveyor, assisted by gravity, accomplish this. When belts are run at high speed, another device, such as bi-polar magnets, is suspended above, to extract iron from the upper surface of the mass. These bi-polar magnets will lift a mule-shoe 12 to 14 inches against gravity.

Many interesting applications of the magnetic separator have been made in different industries. Where magnetic pulleys are operating on extremely large capacities the character of the material operated upon may be such that a piece of "tramp" iron is extracted only occasionally, while on other materials the amount of iron recovered is sufficient to pay for the operation of the entire plant. In the first instance, a magnetic pulley 36 inches in diameter and for a 60-in. wide conveyor belt is handling 500 tons of run of mine coal per hour at the Lakeside power plant of the Milwaukee Electric Railway & Light Co. Here it is absolutely necessary to avoid sparks caused by iron or steel in the pulverizing equipment. The Lakeside plant is the largest pulverized fuel fired power plant in operation today. Sufficient iron is extracted to periodically make it necessary to cart away the accumulation. This iron commands the regular market price.

In the case of the Carnegie slag plant at Youngstown, Ohio, where from 300 to 400 tons of slag is crushed per hour, sufficient iron is recovered to pay for the operation of the entire plant. The iron, primarily a

by-product, supplies the adjoining blast furnace with tons and tons of recovered iron. From 20 to 30 tons of iron daily come from an old abandoned slag pile. In addition the slag, nicely sized and graded, commands attractive prices for railroad ballast, concrete and roofing material.

The adaptation of magnetic pulleys and auxiliary devices operating in conjunction with them, it will be seen, limits itself to materials of rather coarse consistency. Roughly speaking, these pulleys operate on sizes ranging from run of mine coal to say material through 1/8-in. or 1/4-in. mesh. Beyond this degree of fineness, other machines are employed.

For protecting crushers, grinders, disintegrators, pulverizers, etc., magnets are applied on the following materials—coal and slag as already indicated, also phosphate rock, rubber, fertilizer, bone and tankage, ores of all kinds preliminary to treatment in mills, grains, beets, abrasives, drugs and chemicals, charcoal, shellac, roots and herbs, paper and pulp, garbage, cement, gypsum, cotton seed, glass cullet, starch, spices, tobacco, sugar, clay, linoleum, fibre, cocoa beans, etc.

Where materials and products are crushed anywhere from the size of a grain of sugar to an impalpable dust, the iron as fine or finer than the material is separated by means of a separator, the material being distributed thinly and evenly upon a conveyor belt by means of a suitable feeding device. The travel of the belt conveys it thru powerful magnetic zones, usually two or more. A cross belt deflects the small particles of iron after they have been lifted from the mass.

The type "G" magnetic spout made by the Dings Magnetic Separator Co. shown in the engraving herewith is used in mills making cattle and poultry feed, in distilleries and charcoal mills, for extracting bits of metal from their product before going to the grinders, thus preventing damage to the grinder knives, the hammer bars, the corrugations of the rolls or the grids of the attrition plates.

The material is placed in hopper "A" and is kept in motion by feeding shaft "B." Gate "C" is regulated by shaft "D" to obtain the proper flow of material. The material flows over the magnet, the poles "F" and gap plate "G" of which constitute the bottom of the spout. The poles are energized by coils "E." The poles "F" attract and hold firmly any particles of iron passing over the magnet. The iron is then removed by the operator.

These magnets are exceptionally powerful and are made in convenient widths from 8 ins. to 48 ins.

No fire hazard is introduced with the electromagnetic separator other than that accompanying any electrical installation. As to the magnetic pulleys the collector rings are mere slip rings and there is no making and breaking of circuit. To make assurance doubly sure, however, the manufacturers inclose the collector ring always in a dust-proof housing.

When the user is unwilling to pay the extra cost of the enclosed type of motor and generator the manufacturer recommends enclosing the unit in a dust-proof and ventilated room.

All of the Dings Separators are arranged to operate on direct current only, 110 or 220 volts being preferred. Where no direct current is available a belt-driven direct current generator or an A. C.-D. C. motor generator set can be supplied. Additional information will be given on application to the manufacturers, the Dings Magnetic Separator Co., which maintains a service department to make tests on material sent in by those who contemplate installing a separator.

PLANS for the organization of a grain credit bureau in connection with the Kansas City Board of Trade are not complete. The problem of obtaining a suitable location is one factor that must be determined, as it has been found there is not enough room in the quarters of the Clearing Ass'n, where it had been proposed to house the new bureau.

Feed for Baby Chicks.

The susceptibility of baby chicks to various diseases, prominent among which is that known as white diarrhoea, makes the problem of raising chickens an especially difficult one, and as practically all of the common diseases appear to be associated with intestinal disturbances it is readily apparent that the solution of the problem is to be found in proper feeding.

In recent experiments, the Ohio Agricultural Experiment Station has found that the use of skimmilk or buttermilk and an abundance of green feed prevents many of the troubles affecting young chicks. A good ration, supplemented by all the skimmilk or buttermilk the chicks will drink during the first 6 or 8 weeks is regarded as the most effective treatment for white diarrhoea. These milk feeds furnish, also, a good treatment for coccidiosis, a highly contagious disease which may break out when the chicks are from 4 to 8 weeks of age.

For leg weakness, an abundance of finely cut succulent green feed with plenty of exercise is helpful. Intestinal worms, which are responsible for many immature and inferior pullets in the flock, may be eradicated by feeding two pounds of tobacco dust in each 100 pounds of dry mash. The medicated mash may be fed for 4 weeks.

These adjuncts to the feed dealers regular lines, and the assistance he can give his customers by furnishing them with this helpful advice, will assist materially in increasing his sales of feedstuffs of all kinds.

Adulteration and Misbranding.

Under the Food and Drugs Act, the following judgments have been rendered in the United States District Courts for the Bureau of Chemistry:

The Standard By-Products Co., Inc., of Louisville, Ky., labeled tankage "Protein 60%," but analysis of a sample showed 55.4% protein. Plea of guilty to the information was entered, and fine of \$50 was imposed.

Middlings shipped by D. W. Dietrich & Co., Leesport, Pa., was in packages not marked conspicuously on the outside to show the quantity of the contents. Fined \$25.

The Humphreys-Godwin Co., of Memphis, Tenn., shipped cottonseed meal labeled to indicate 41% crude protein, while analysis showed only 37.69% and 36.69% in different samples. Fined \$25 and costs. The same company was made defendant, with the Union Seed & Fertilizer Co., of Memphis, Tenn., in another suit based on failure of cottonseed meal to come up to the marked analysis of 38.62% to 43% protein and 3% to 12% of crude fibre. In this case the Union Seed & Fertilizer Co. was fined \$100 and costs and the Humphreys-Godwin Co. was fined \$25 and costs.

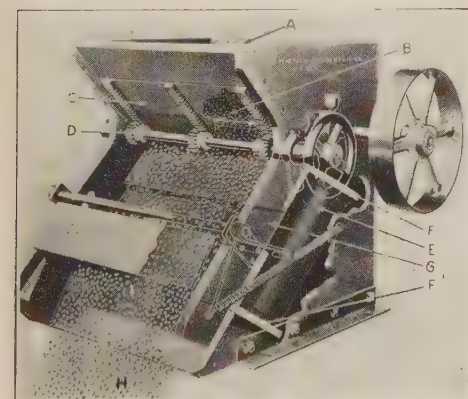
Cottonseed cake shipped by the Osage Cotton Oil Co., of Tulsa, Okla., was marked "100 lbs. gross, 99 lbs. net." Examination of 35 sacks of the shipment showed average net weight of 96.46 lbs. Plea of guilty was entered, and fine of \$100 and costs imposed.

The McCall Cotton & Oil Co., of Phoenix, Ariz., shipped cottonseed meal labeled "protein 43%," but protein content of a sample analyzed was 38.61%. Answer was filed admitting the claim, but alleging the misbranding was done in error, and the product was released to the defendant, upon execution of bond, conditioned on relabeling in proper manner.

The Osage Cotton Oil Co., trading at Checotah, Eufaula and Ada, Okla., shipped cottonseed meal labeled to indicate not less than 7 1/2% ammonia and 38.5% protein. Analysis of samples from three consignments showed 36.13%, 33.9% and 35.6%, respectively, of protein, and 7.01%, 6.6% and 6.92%, respectively, of ammonia. Plea of guilty was entered and fine of \$200 and costs imposed.

Horse feed, shipped by the Quaker Oats Co., trading at Morris, Ill., contained 8.78% protein and 2.35% fat according to analysis of a sample, but the label indicated 10% protein and 2.5% fat. Fined \$50 and costs.

The Shelby County Cotton Oil Mill, of Memphis, Tenn., was charged with shipping in interstate commerce cottonseed meal that contained 33.4% protein and 16.76% crude fiber, and with labeling it "protein 36% and fiber 15%." The defendants entered pleas of nolo contendere to the information, and fine of \$50 and costs was imposed.



Ding's Magnetic Spout.

Automatic Grain Weighing Scales

By H. S. Spencer, Scale Inspector, A. T. & S. F. Ry. Co., Topeka, Kan.

Seventy automatic grain weighing scales were tested on a trip which I have just completed. The scales ranged from 3 bus. to 15 bus. capacity per dump, and were of various makes, but one type predominated.

Most scales out of balance.—Out of seventy automatic scales tested I found 56 out of balance from two ounces to 3 lbs.; 35 were dirty; 49 the operators said are never compensated, and 61 were so installed that loading spout from discharge hopper ran through a bin.

This very bad showing for the operators of this type of scale seems to be due to lack of interest, and ignorance on the part of the owners. There is no excuse for an operator allowing his scale to become dirty and be out of balance, as it does not require a great deal of knowledge to overcome these conditions. As to keeping the scale compensated correctly, and having it installed properly, the instructions and booklets put out by the manufacturers of these automatic scales, if followed, will insure better weights.

Economy of space.—One of the main reasons this type of scale is used at the interior or country elevator is, the small amount of space that it requires in an elevator, usually giving room for an extra bin, located directly beneath the discharge hopper of the scale and through which the loading spout usually runs. This small amount of space is quite often carried to the extreme, and scales are installed without ample clearance around them, for ready inspection by the Scale Inspector or Weighmasters who have charge of them.

Location.—If these scales are to be used they should be preferably located in top of the elevator. The supply hopper should be large enough to hold more than one draft of the scale, so that a steady flow of grain can be supplied that will keep the dribble full to capacity. The supply hopper should have a baffle so located that it will break the force of grain before it reaches the supply gate. The scale should be located so that there is ample clearance on all four sides of the scale, and on a raised bridge so that the scale comes about even with the waist line of an ordinary man. The discharge hopper should be large enough to hold more than one draft of scale, and should be of such depth, that when scale discharges into it, the top line of grain will be below edge of scale discharge gate when open.

The discharge hopper and loading spout should be lined with metal, and the loading spout should not run through bins, if possible to prevent. There should be plenty of light so that registers which record the number of dumps, can be easily seen when Weighmaster is taking record, and in no instance should registers be used other than those placed on scale by the manufacturers.

The most common faults that I found on this trip, were the scales placed in places that they were not easily accessible, especially the weight box. It would be next to the wall of the elevator and could not be opened without taking out the hinge screws, or the weight box would hang over the bin and no ample footing, this condition causing the operator to dislike to balance scale as often as he should, therefore neglecting to do so. The scale sometimes was installed so that it came level with the floor of the elevator, with compensating side of scale next to elevator wall and very hard to get to. Some of the scales were located on rafters over bins with no floor around them. Some had the appearance of never having been cleaned, were covered with dust, the bearings full of dust and grain which had been there long enough to become caked and hard. Some were in dark places, others next to windows which were left open subjecting the scale to rain and snow. Some of the scales were located on the same floor with a cleaner, and the vibration would prevent getting an accurate balance and compensation.

Manlift necessary for access to scales.—Some of the elevators were not equipped with a manlift, the operator having to climb a ladder; and two or three of the elevators did not have even a ladder. It is necessary to keep the scale clean and in balance at all times. The specifications contained in ICC ruling in Docket 9009 require that scale be compensated at start of loading of each car, and in addition at least four times thruout the loading of each car. This ruling is winked at by a very large percentage of operators. Some claimed that they did not know it was necessary to try compensation, and frankly stated that they had not tried it since the last time the scale inspector had tested scale, and could not see the reason for it. It is much easier to get to scale if elevator has a manlift, but the majority of operators will not climb a ladder five or six times during the loading of a car to see the scale is operating correctly, and to catch test drafts, if they can get out of it. One thing is sure if it was not necessary to get reading of register numbers (register is usually located on scale), some of them would not see scale as often as they do.

When setting the compensation the operator will not run grain fast enough to keep the dribble full. He will then go to scale set compensation and then go down stairs and open elevator leg supply gate, thus giving the scale a different flow of grain and consequently changing compensation.

I find that quite a few supply hoppers have no baffle plates to check the irregular flow of grain and keep it from striking the supply gate. The baffle plate tends to make a more even flow of grain, so that closer compensation can be made of dribble. The supply hoppers are not always large enough, so that a full feed of grain can be supplied to scale and at the same time keep it from running over. They are built in all shapes and sizes.

The discharge hoppers are not always large enough and are not placed far enough below the scale, so that when grain is discharged into them it clears the gate, thus retarding the action of the scale. Very few of the discharge hoppers and loading spouts are lined with metal, and usually the discharge hopper is below a floor or in a closed bin, as is also the loading spout, so that if leak does occur it is not usually discovered until quite a number of cars have been loaded.

The registers that record the number of dumps into car get out of order, once in awhile. Some scales are provided with two registers, but where only one is provided, quite a number of cars might, and have been loaded without the error being discovered. Where there are two registers, this fault is more apt to be caught in time, that is, if the operator takes the pains to read both registers. Out of seventy scales tested, fifty-one had two registers, and out of 51 that had two registers there were sixteen operators who were not taking the pains to read both registers to compare them or keep record of both registers. I found that several were memorizing the register numbers until they got down stairs, and were then entering them in book, or that they would write them on a piece of paper, take them to office for transcription and then destroy the original record. Some take the last reading from book, figure the number of dumps desired in car and when finished loading would get the last number and enter it in book. These practices are very bad, and tend to cause serious errors at times.

Installation faults are usually caused by the owners trying to install their own scales. These parties usually do not know that there are certain specifications, which must be followed, and are not always competent to do a reliable job. The scales are crowded into some small space, in between a lot of spouts, to suit the owner's convenience, or to favor some certain spout, rather than properly locate and install the scale. No thought is given to conditions under which the scale will have to work, and therefore accuracy is sacrificed for convenience.

Most country elevator operators have not come to realize, that it is just as necessary that they take the same amount of care of their shipping scale, as the terminal or Board of Trade organizations do, who usually have a large capacity scale that will weigh a car load at one draft, while it takes from 200 to 500 drafts on the ordinary automatic scale to load a car and a small error thus be multiplied a great many times if great care is not taken.

Most elevator operators have a multitude of duties, such as buying grain, weighing it on wagon scale, dumping it in the elevator, cooping cars, answering telephone calls, keeping the elevator engine going, and if they are not reminded pretty often they are apt to forget all about the scale upstairs, which usually comes second after all other duties.

I note in a certain book of instructions, that there is a paragraph which reads like this: "Scale needs very little attention, but it does need some, and unless you intend to give it some, you had better not use one." My belief is that hopper scales, whether hand or automatically operated, the latter type weighing two, three or four bushels to a draft, used in weighing carload grain, in such small drafts, require a great deal more attention, if dependable weights are desired, than hopper scales of reasonable capacity, and until elevator operators who use these scales realize this, in the small drafts weighed on them, should get out of the idea that just because they are named "Automatic Scales" they need no attention, but the fact is, they need a greater amount of attention, not only by testing and keeping them in good working condition, but also during the weighing.

No amount of research or education can accomplish better scales and weights, unless the co-operation of all concerned can be obtained, but with sufficient educational machinery, of which this body of men here present consists, we should be able to pound home the fact that

scales need very careful attention and lots of it, at the country elevator as well as the terminal elevator, if correct weights are to be had.

The truth is sure to have its effect, if this particular group can present its argument extensively enough to make itself heard.

Annual Meeting National Scale Men.

The 7th annual meeting of the National Scale Men's Ass'n was held at Chicago, Ill., Mar. 14, 15 and 16 at the Auditorium hotel, with about 150 in attendance.

A. C. Badize on behalf of the Chicago Ass'n of Commerce welcomed the members, and was followed by M. H. Ladd in his address as president.

Miss Elva Lee Perry read a paper on "The History of Weights and Measures," giving data hitherto not generally known, her thorough research earning her an honorary membership in the Ass'n.

Dr. S. W. Stratton, director of the Bureau of Standards, Washington, D. C., expressed gratification at the co-operation he was enjoying from scale manufacturers.

H. A. Foss, weighmaster, Chicago Board of Trade, chairman of the com'te on uniform grain weighing, said:

We take pleasure in making this our fourth annual report of the doings and accomplishments of your comite on uniform grain weighing.

As you are already aware, your comite some years ago caused to be created a joint organization of terminal grain weighmasters, and the comite on grain-weighing of the National Scalemen's Ass'n, which organization has been made permanent, and is known as the Weighmasters' Scalemen's Conference.

The Weighmasters' Scalemen's Conference held its annual meeting in October, 1921, at Chicago. At this meeting action was taken with reference to grain weighing matters.

Mr. Foss gave a summary of the proceedings at the October conference which were published in full in the Journal Oct. 10, pages 496 and 497.

H. S. Spencer, scale inspector of the Atchison, Topeka & Santa Fe Ry. Co., Topeka, Kan., read a paper on "Automatic Grain Scales." [See columns 1 and 2, this page.]

Wednesday noon a banquet was given at the hotel and the afternoon was devoted to a visit to the railway appliance show at the Coliseum, where many scales were on view as manufacturers' exhibits.

Officers chosen for the ensuing year are: Pres., H. H. Alfrey, El Reno, Okla.; vice pres., C. Pettis, Rochester, N. Y.; sec'y-treas., A. G. Zeible, Dallas, Tex.; executive com'te, J. A. Schmitz, Chicago, Ill., chairman, C. A. Phares, Fairbury, Neb., A. Malmstrom, Topeka, Kan., C. G. Stooddy, Chicago; Chairman membership com'te, C. C. Neale.

Pacific Northwest Considers Wheat Grades.

At a meeting of grain dealers, millers and representatives of farmers held recently in Spokane, Wash., to consider the proposed changes in grades for spring wheat, a resolution was adopted expressing the opinion that 58-lb. wheat should grade No. 1, and that the standards should be changed accordingly. It was contended that as the bulk of the wheat of fair average quality tests 58 lbs. this, and not better wheat, should constitute the grade of No. 1.

Walter J. Robinson, mgr. of the Washington-Idaho Wheat Growers Ass'n, opposed lowering of the grade requirements, and said that the price will drop with the lowering of grade requirements, and the farmer will get less for his wheat. He asserted that fully 79% of the wheat tests 58 lbs. or better, and claimed that if 58-lb. wheat is made to grade No. 1 the farmer with 59-lb. and 60-lb. wheat would lose unless a system of premiums were instituted for test weights above 58.

The meeting decided to recommend to the Sec'y of Agriculture that the sub-class of Red Walla should be abolished and Red Western substituted, with the test for No. 1 raised to 60 lbs., also that a class be established for Northern Spring, to test 59 lbs. for No. 1 and

carry 97% of dark, hard and vitreous berries, and be known as Dark Hard Northern Fancy, Common White and White Club wheat would be known as "white wheat" and subdivided into Hard, Soft and Western white wheats.

Supply Trade

Peoria, Ill.—There will be considerable elevator building in Illinois this year, and a great amount of repairing and remodeling.—Geo. Saathoff.

Washington, D. C.—The National Screw Thread Commission, created in 1918, has been extended for 5 years from Mar. 21 in a bill which has just passed both houses of Congress, H. J. Res. 227.

Chicago, Ill.—At a recent meeting of the Engineering Advertisers Ass'n, Julius Holl, adv. mgr. of Link-Belt Co. was elected president and C. H. Connell, adv. mgr. of Weller Mfg. Co., was elected treasurer.

Washington, D. C.—Manufacturers of transmission rope and other cordage are preparing to standardize their product, as to sizes, and nomenclature, and adopt uniform tests and eliminate unnecessary varieties. About 80 per cent of the industry was represented at a meeting in this city recently with officials of the Bureau of Standards.

New York, N. Y.—Important developments that have taken place in the movement to nationalize engineering and industrial standards are set forth in detail in the report now being issued relating to the work of the American Engineering Standards Committee during 1921. The activities of the American Engineering Standards Committee have developed to such an extent that work is now underway on 79 distinct projects which have reached an official status. In its work, 160 bodies of national importance are cooperating, these having designated more than 500 individuals as official representatives to serve on sectional committees working under the auspices of the Committee.

Chicago, Ill.—Much additional evidence against the Pittsburgh plan of pricing steel is being presented to the Federal Trade Commission. The hearings are expected to continue for two months. If priced at the mill in Chicago making the steel, the Chicago-made tank costing \$1,300, H. E. White, traffic adviser of the Western Rolled Steel Consumers Ass'n testified, would have an advantage of \$114 at Detroit, \$63 at Milwaukee, \$21 at Toledo, \$49 at St. Louis, \$103 in Kansas City and \$111 at Denver, Colo. Pittsburgh plus has prevailed for 13 years, but last December competition among the steel mills removed the handicap, and jobbers are now quoting iron and steel on the Chicago basis. Reductions in warehouse prices have been made.

To Discuss Trade Statistics.

A conference will be held in Washington Apr. 12 between the Sec'y of Commerce and representatives of trade associations to discuss means and methods for collecting and forwarding to the Dept of Commerce certain statistical information which the Dept expects to obtain from the associations.

The manner and method of distributing the information obtained will also be considered.

THE REQUEST of the Canadian Council of Agriculture for the reestablishment of the Canadian Wheat Board to control grain marketing has been referred to the agricultural committee of the house of commons.

THE CHINCH BUGS have been promised another successful year in northwest Ohio by an aspiring candidate for membership in the Crop Killers Union, so it is up to the grain dealers of that section to encourage the farmers to plow deep and burn all dead grass.

THE REPORT of the committee of the National Retail Coal Merchants Ass'n, embodying complete and simplified uniform accounting systems for retail coal merchants has been submitted. The complete report, in booklet form, is being sent to coal dealers by the Retail Coalman, Chicago.

Cement Manufacturers Indicted.

Federal indictments against 26 corporations and 48 individuals, charging violation of the Sherman Anti-Trust Law in connection with the cement industry, were returned by a grand jury in Chicago, March 15. These indictments, resulting from a federal investigation covering a period of two years, follow similar action in New York, where 74 corporations and 40 individuals were indicted.

It is charged that the corporations, headed by the individuals, conspired to keep cement made in other parts of the country out of the middle west to increase the price of the commodity. The Midwest Cement and Statistical Bureau, a parent organization having five section branches, is declared to be an association formed by the cement manufacturers, and to have called meetings of its members from time to time to fix prices. The association is charged with having sent out daily, semi-monthly and monthly reports of conditions in the business, and at monthly meetings of the members it is said they gave to each other information pertaining to their respective business.

The indictment states that the companies named produced 25,000,000 barrels of cement last year, this being 90% of the amount used in the district in which they operate, and 25% of that used in the entire country.

The corporations indicted are as follows: Lehigh Portland Cement Co.; Aetna Portland Cement Co.; Alpha Portland Cement Co.; Atlas Portland Cement Co.; Cape Girardeau Portland Cement Co.; Castilia Portland Cement Co.; Continental Portland Cement Co.; Crescent Portland Cement Co.; Diamond Portland Cement Co.; Hawkeye Portland Cement Co.; Newago Portland Cement Co.; Northwestern Portland Cement Co.; Peerless Portland Cement Co.; Peninsular Portland Cement Co.; Sandusky Portland Cement Co.; Universal Portland Cement Co.; Huron Portland Cement Co.; Wyandotte Portland Cement Co.; Indiana Portland Cement Co.; Kosmos Portland Cement Co.; Marquette Portland Cement Co.; Michigan Portland Cement Co.; Missouri Portland Cement Co.; Wabash Portland Cement Co.; Wellston Iron Furnace Co.; and Wolverine Portland Cement Co.

The individuals indicted are officials of the above named companies.

JOE LEITER, testifying last week in a suit brought against him for \$673,000 by E. and J. Hoadley, said that when his wheat corner collapsed he was left with an indebtedness of \$3,250,000. That dose should be enough to relieve any bull of chronic stubbornness. The wise man knows when he is licked and goes away to try some other day.

Books Received

SPECULATION; Its Sound Principles and Rules for Its Practice, defines what speculation is, and what price and value really are, exposes some of the wild schemes that have been recently put forward to "stabilize" prices or "cure" economic ills, delves deeply into the psychology of speculation, explains the principles involved in price changes and deduces certain practical rules. The author's keen logic demolishes Professor Irving Fisher's flexible dollar. In his analysis of the co-operative movement he states that "At bottom, co-operative marketing is based solely on the theory of monopoly." Chapters are devoted to class legislation and the U. S. Grain Growers, Inc. "The Two Parts of Speculation," "Rules and Principles," "Greed and Fear," "The Law of Averages," "News, Gossip, Information and Tips," "Manipulation," "Deciding What to Do," "Acting on Decision," "Time and Particular Markets." The author is Thomas T. Hoyne, who as "Argus" astonished the trade with correct daily forecasts of the wheat market. Published by the Economic Feature Service, Chicago, Ill. Price, \$2.50.

ELLIS DRIERS

XX

When we sell you a grain drier we expect it to give you a life time of service. It is not exceptional to find Ellis Driers in good operation after 20 years of hard service. Proper design, good material and conscientious effort on our part is the reason for such continued service.

If you want real value for your investment there is really only one thing for you to do when it comes to Grain Driers, and that is to purchase an "ELLIS".

XX

THE ELLIS DRIER CO.
Roosevelt Road and Talman Ave.
CHICAGO, U.S.A.

CIFER CODES

Use a good Telegraph Cipher Code, Prevent Errors, Reduce the Cost of Sending Messages and Prevent Contents Becoming Known to Agents.

Universal Grain Code, the most complete code published for the use of grain dealers and millers. Its use will reduce your tolls one-half. Its 150 pages contain 14,910 code words for grain trade terms and expressions; no two near enough alike to cause confusion. Bond paper, flexible leather, \$3.00; Book paper, board cover, \$1.50.

Robinson Cipher Code, revised, with 1912 and 1917 Supplements for domestic grain business. Bound in flexible leather, price \$2.25; cloth, \$1.75.

A. B. C. Improved 5th Edition, contains a complete set of five letter code words for every expression in the former edition. Any two of these words may be combined and sent as one word, reducing telegraph tolls 50 per cent. Price in English, \$18.00.

Miller's Code (1917), for milling and flour trades, 3 1/2 x 6 inches, 77 pages, \$2.00.

Baltimore Export Cable Code, most popular and simplest code for export trade. Bound in red leather, third grain edition, 413 pages, size 7 x 9 1/4 inches, \$15.00; fourth edition, for grain, stocks, bonds and general merchandise, 160 pages, 6 1/4 x 9 inches, \$15.00.

Cross Telegraphic Cipher Code, for provision and grain trade. 145 pages, bound in flexible leather, \$2.00.

Your Name in gilt letters stamped on front cover of any of the above books for 35 cents extra. Any code upon short notice.

Grain Dealers Journal

309 S. La Salle Street,

Chicago, Ill.

Supreme Court Decisions

Carrier Seller's Agent.—Where B. and V. sold two carloads of hay to S. to be delivered at W. at a stipulated price per ton, and shipped the same to themselves, consigned to their order, held, that the carrier was the agent of B. and V. for the delivery of said hay, and they were liable to S. in damages for the failure of the carrier to deliver.—*Bower-Venus Grain Co. v. Sam J. Smith, Central Texas Grain Co.* Supreme Court of Oklahoma. 204 Pac. 265.

Measure of Damages for Breach of Contract.—The measure of damages for breach of a sale contract is the difference between the contract price and the market price on the day of the breach, and where plaintiff charged a specific day which the evidence supported, and there was evidence that the market price of oats on that day was from 43 to 46 cents, and the jury allowed something less than 45 cents, held, that the defendant suffered no prejudice because of any failure of the instruction on the measure of damages to fix a date.—*Maguire v. Wm. Grettenberg Grain Co.* Supreme Court of Iowa. 186 N. W. 644.

Carrier's Notice of Arrival.—Within the provision of a B/L limiting liability to that of a warehouseman after a notice of arrival had been duly sent or given, the expression "duly sent" means sent in a regular and approved manner, so that it is sufficient if notice by a letter stamped and addressed is deposited in the post office, though it was not received. A B/L requiring notice of arrival of the goods to be duly sent or given does not make actual notice necessary, since the words "or given" are qualified by the words "duly sent," and proof of either the due sending of the notice or actual notice is sufficient.—*Peavey v. Philadelphia, B. & W. Ry. Co.* Court of Appeals of District of Columbia. 277 Fed. 333.

Theory of C. I. F. Contract.—The theory of a c. i. f. contract is that it constitutes a sale of goods by a delivery, not of the goods, but of a B/L, invoice, and policy or certificate of insurance, and that it is incumbent on the seller to deliver or tender delivery of such documents within a reasonable time after the agreed date for shipment, and that on performance of that duty it becomes the buyer's duty to accept the documents and to enforce any claim of liability against the carrier or the insurer, and it is therefore immaterial in whom the title was, at or prior to delivery or tender of the documents, or whether the goods were lost in transit before or after such delivery or tender.—*Dwane v. Weil.* Supreme Court of New York. 192 N. Y. Supp. 393.

'Phone Conversation Closes Sale.—Where offer was made and accepted over the telephone, and buyer subsequently wrote seller, "We are pleased to confirm purchase * * * for shipment today," pursuant to seller's request over the telephone for written instructions, the sale was consummated over the telephone, and not by the letter, and the goods became the property of the buyer when the contract was concluded by telephone, although remaining in the seller's care and possession, since "to confirm" the purchase means that purchase had theretofore been made, and the letter was simply a written memorandum thereof, confirming the purchase with instructions as to the method of shipment.—*Geo. Daily v. Horner Elevator & Mill Co.* Appellate Court of Indiana. 133 N. E. 585.

Seller's Recourse on Refusal of Goods.

Where one who has entered into a binding written agreement to buy and pay for certain goods notifies the seller, prior to the delivery of the goods, that he will not accept and pay for them if tendered, the seller may refuse to agree to a rescission of the contract, and, if the buyer thereafter refuses to take and pay for the goods when tendered to him in accordance with the terms of the contract, the seller may, under the provisions of Civil Code 1910, § 4131, store the goods for the use and benefit of the defaulting buyer and sue for the entire purchase price.—*Dunaway v. Colt Co.*, 26 Ga. App. 554, 106 S. E. 599, and citations.

(a) The evidence in the instant case sufficient to authorize a finding that the identical goods shipped to and refused by the buyer were stored for his benefit by the seller, and that they were being held by the seller for the buyer at the time of the trial of the case.—*Newman v. J. B. Colt Co.* Court of Appeals of Georgia. 110 S. E. 321.

Shipowner's Liability to Shipper.—Libellant, an exporter of grain, contracted with respondent for cargo space on a designated steamship for 5,000 bushels of wheat from Baltimore to Hamburg, but before doing so, in accordance with the custom of the trade, contracted for the sale of the grain in Hamburg to arrive by such steamship. Respondent desired to substitute another vessel, but the Hamburg buyer refused to consent, except at a stated reduction in the price of grain, and as respondent would not agree to stand the loss and refused to accept the shipment on the vessel named, libellant sold the grain in Baltimore and brought suit for breach of the contract. Held, that its damages recoverable were limited to the amount it would have lost if it had shipped by the other vessel and accepted the reduced price. Where a shipowner, contracting to carry a cargo of grain to a foreign port, had knowledge of the custom of shippers of grain to contract in advance for sale of the cargo to arrive, it contracts with reference thereto, and on breach of its contract to carry is liable for the resulting loss to the shipper, arising from his failure to deliver under his contract of sale.—*The Manhattan.* U. S. District Court, Maryland. 276 Fed. 823.

Liability for Delaying Account Sales.

Dustin Grain Co., Oklahoma City, Okla., plaintiff, v. Lawther Grain Co., Dallas, Tex., defendant, before Arbitration Com'te No. 2 of the Grain Dealers National Ass'n, composed of F. B. Bell, E. H. Bingham and H. W. Reimann. Car C. P. 73750 was inspected at Galveston on Oct. 2, 1920, unloaded Oct. 5, railway expense bill dated Oct. 11, but no accounting was received by plaintiff until May, 1921, when an account sale was received dated May 6, seven months after the car had been unloaded. Plaintiff claims that owing to the delay in receiving out-turn weights it was unable to make a claim on the railroad for shortage of 900 pounds, as the six months limit for making such claim had expired. Plaintiff claims that for this reason defendant owes it \$49.38, instead of \$9.53 which defendant admits, the difference \$39.85 representing the shortage which plaintiff claims it could have collected from the railroad company, if final accounting had been made promptly.

Defendant shows that on shipments for export the time for filing such claims was nine months instead of six months and consequently, plaintiff still had two months in which to file the claim.

While plaintiff doubtless made an error in thinking his time for making claim had expired, nevertheless it appears to this com'te that seven months is an unreasonably long time to delay final accounting, so that defendant can not shift the entire burden on plaintiff and this com'te therefore awards plaintiff on this car one-half of the difference that it claims, or \$19.98, and assesses to defendant the cost of arbitration.

THE annual meeting of directors, delegates and members of the Millers National Federation will be held at the Blackstone Hotel, Chicago, Apr. 21.

CONTACT of any exposed portion of the body with a moving transmission rope will give the contactor a wholesome respect for that rope; but why not provide a guard to prevent such an accident?

ABOUT 600 cars of grain are said to be still on track at Galveston, some of it having been there since August. Much of the wheat remaining at the port is of undesirable quality, the same report states.

Wheat Should Be Inspected on Arrival.

Sam. W. Martin, plaintiff, v. Thompson-Wilson Co., Chadwick Grain Co., Smith Bros. Grain Co. and Hall-Baker Grain Co., defendants, before the Arbitration Com'te of the Texas Grain Dealers Ass'n, composed of Joe E. Lawther, R. L. Cole and J. V. Neuhaus.

This controversy arises over the sale of car of wheat by Thompson-Wilson & Co., of Sherman, Tex., to Sam. W. Martin of Plainview, Tex., which in turn was sold to Chadwick Gr. Co. of Ft. Worth; by Chadwick to Smith Bros. Grain Co. of Ft. Worth, and by Smith Bros. to Hall-Baker Grain Co. of Kansas City, Mo.

The wheat moved out of Happy, Tex., on Aug. 31, 1920, and finally, on instruction of Hall-Baker, was shipped to Texas City. Testimony develops the fact that Hall-Baker Gr. Co. permitted this car of wheat to remain on track at Texas City 28 days without having wheat inspected. Finally, however, they had the car diverted to Galveston, where, on Oct. 23, car was inspected and found to grade sample grade, hard winter wheat, test 54, live weevil, hot and sour. Testimony further develops the fact that Thompson-Wilson testified, as per their affidavit attached to pleadings, that the wheat was sound, dry and tested 58 lbs. when loaded into car at Happy, which would indicate to the com'te that the wheat was No. 2 grade when loaded.

It is the opinion of the com'te that strictly sound, dry wheat, of the character Thompson-Wilson represent the wheat in this car to have been, would have carried to destination in good condition if car had moved promptly. The com'te is of the opinion that Hall-Baker were exceedingly negligent in allowing this car of wheat to stand on track at Texas City for 28 days without having same inspected. We are of the opinion that it was not only their privilege to have had the wheat inspected promptly on arrival at Texas City in order to have protected their own interest, but that it was their duty to have had the wheat inspected promptly on arrival at Texas City in order to protect and show liability of all, if any, handlers of the wheat in question. It is the opinion of the committee that Hall-Baker Grain Co. were grossly negligent in not having car wheat inspected before diverting from Texas City to Galveston.

Because of the gross negligence of Hall-Baker in the handling of this car of wheat, which moved out of Happy on 8/31/20 and was not inspected until Oct. 23, 1920, should relieve all parties concerned, excepting Hall-Baker, from any responsibility on account of deterioration of the wheat. The com'te, therefore, so finds and instructs Hall-Baker to render account sales to Smith Bros. on this car of wheat basis grade No. 2 wheat; instruct Smith Bros. to likewise render A/S to Chadwick Grain Co. and on receiving A/S from Hall-Baker on the same basis; Chadwick Grain Co. to render A/S on the same basis to Sam W. Martin and Sam W. Martin in turn, to render A/S to Thompson-Wilson Co. Com'te hereby orders Hall-Baker to accompany their A/S with check for amount of this claim, \$220.40, made payable to H. B. Dorsey, sec'y. Secretary is instructed to return to Sam W. Martin, Thompson-Wilson & Co., Chadwick Grain Co., and Smith Bros. Grain Co. the amount of their deposit fees in this case.

Foreign Trade Volume Increases.

The volume of exports of agricultural products from the United States increased considerably in 1921, altho, due to the lower values, the amount expressed in dollars was lower.

More wheat was exported during 1921 than in any other year in the history of the country, and corn exports were the largest since 1900. Thirty-two principal agricultural products entering into our export trade showed an increase of 27% for 1921 over 1920. However, the value of these products was 40% less than in 1920.

Wheat and flour exports totaled 355,550,000 bus., in 1921, and the largest former record was in 1920 when 307,630,000 bus. went overseas. Corn exports in 1921 were 132,000,000 bus., compared with 21,230,000 bus. in 1920.

OWEN L. COON

Railroad Claim Attorney
Association Building
CHICAGO

No charge if nothing collected.
Now handling more than 7500 claims annually.

Representing Sixteen State Grain and
Livestock Shipping Associations



Kill Rats

NEW WAY

In France the World's greatest laboratory has discovered a germ that kills rats and mice by science. Absolutely safe. Cannot harm human beings, dogs, cats, birds, chickens, or pets. Quickly clears dwellings and outbuildings, with no offensive after effects. It is called Danyasz Virus.

Get our free book on rats and mice telling about VIRUS and how to get some.
Free Book
H. P. Virus, Ltd. 121 West 15th Street, New York

Changes in Rates

As shown by tariffs recently filed with the Interstate Commerce Com'n the carriers have made the following changes in rates:

C. R. I. & P. in a circular issued Feb. 27 gives notice of cancellation and withdrawal of certain tariffs and supplements, effective Apr. 1.

C. R. I. & P. in Special Sup. to tariffs, issued Mar. 8 and effective Apr. 15, names reductions in various rates on grain and grain products.

C. & E. I. in 625 names joint rates on grain and grain products from stations on its lines to points in Ala., Ark., Fla., Ky., La., Miss., and Tenn., effective Apr. 1.

Western Trunk Lines in Sup. 19 to 1-P names rules, regulations and exceptions to classifications, including some applications to grain and grain products, effective Apr. 15.

Western Trunk Lines in Sup. 18 to 1-P gives rules, regulations and exceptions to classifications, including some items applying to grain and grain products, effective Apr. 3.

C. R. I. & P. in Sup. 10 to 27537-F names joint and proportional rates on grain, grain products, seeds, hay and broom corn from stations on its lines in Ill., Ia., Kan., Minn., Mo., and Neb., to stations in Ill., Ind., Ky., Mich., N. Y., Ohio and Pa., effective May 1.

A. T. & S. F. in Sup. 19 to 7481-G names joint rates on grain products and seeds from stations in Colo., Kan., Mo., and Okla., also Superior, Neb., on its lines, on the G. C. & S. F., and the L. & T., to points in Ala., Ark., Kan., La., Mo., Miss., Okla., Tenn., Tex., effective Apr. 15.

C. R. I. & P. in Sup. 11 to 31408-A names local, joint and proportional rates on grain, grain products, seeds and broom corn from stations in Colo., Kan., Mo., Neb., N. M., and Okla., also Council Bluffs, Ia., and Memphis, Tenn., to Memphis, Tenn., New Orleans, La., and stations in Ala., Ark., La., Miss. and Okla., effective Apr. 1.

C. R. I. & P. in Sup. 9 to 13207-I names joint proportional rates on grain, grain products and seeds from Albright, Neb., Armourdale (Kansas City, Kan.), Atchison, Kan., Council Bluffs, Ia., Kansas City, Mo., Leavenworth, Kan., Omaha, South Omaha, Neb., and St. Joseph, Mo., to stations in Ill., Ia., Mich., Wis., on connecting lines, effective Apr. 18.

C. R. I. & P. in 19687-N cancels 19687-L and withdraws 19687-M of joint and proportional rates on grain, grain products, seeds, hay, broom corn from Mo. River stations and other stations in Ill., Ia., Minn., Mo., and S. D. on C. R. I. & P. and C. D. & M. to Miss. Valley points and other stations in Ala., Ark., Fla., La., Miss., and Tenn., also to Gulf Ports for export, effective Apr. 1.

C. R. I. & P. in Sup. 19 to 29329-D names local, joint and proportional rates on grain, grain products and seeds between Albright, Omaha, South Omaha, Neb., Armourdale (Kansas City), Leavenworth, Atchison, Kan., Council Bluffs, Ia., Kansas City, St. Joseph, Sugar Creek, Mo., station in Ia., Mo., Neb., on its lines, on C. B. & Q. and M. P., and stations in Ill., Ind., Ia., Minn., Mo., S. D., Wis., effective Apr. 1.

Ill. Central has issued notice that the Interstate Commerce Com'n has rejected Sup. 14 to 601-F naming rates on grain, grain products, hay and seeds between stations in Ia., Minn., S. D., on its lines and on C. R. & I. C. Ry., Ft. D. D. M. & S. Ry., W. C. F. & N. Ry., W. & S. F. Ry., and Chicago, Peoria, Ill., St. Louis, Milwaukee, Minneapolis, Omaha, Ohio River Crossings and other stations in Ill., Ind., Ia., Minn., S. D., Ohio, Wis.

C. & E. I. in Sup. 16 to 622-G names local, joint and proportional rates on grain, grain products and by-products, also other commodities including certain seeds, from stations on its lines and stations on the C. & I. C. Ry., also from Henderson and Owensboro, Ky., and from Cairo, Ill. (via M. & O.), Joliet, Ill. (via E. J. & E.), and Moline Transfer, Ill. (via C. M. & G.), to points in Ill., Ind., Ia., Ky., Mich., Minn., Mo., Ohio, Pa., and Wis., effective Apr. 1.

C. B. & Q. in Sup. 14 to 1218-G names local and joint rates on grain, grain products, etc.,

from stations on its lines in Kan., Neb., Wyo., and Colo., also from stations in Wyo., on the C. & S., to Cairo, Metropolis, Ill., Evansville, Ind., Memphis, Tenn., New Orleans, La., also Port Arthur, Beaumont, Galveston, Houston, Texas City, Tex., New Orleans, Southport, Westwego, Port Chalmette, La., Pensacola, Fla., Mobile, Ala., Gulfport, Miss., when for export.

C. R. I. & P. in sup. 23 to 28675-D names local, joint and proportional rates on grain, grain products, broom corn, alfalfa cake and meal, linseed cake and meal and seeds between Chicago, Peoria, Rock Island, Ill., Council Bluffs, Ia., Kansas City, St. Joseph, St. Louis, Mo., Minneapolis, St. Paul, Minn., Omaha, Neb., also stations in Colo., Ill., Ia., Kan., Minn., Mo., Neb., Okla., S. D., and stations in Colo., Kan., Neb., N. Mex., Okla., and Texhoma, Tex., effective Mar. 27.

Governmental Waste.

In the government operation of any public service the total absence of any necessity to conduct the enterprise on a paying basis in order to maintain the job-holders in office leads to an extravagance and waste that would not be tolerated in a business privately owned and managed.

An example was unwittingly furnished by the Hon. Cleveland A. Newton of Missouri in his statement delivered some time ago before the House com'te on appropriations. He argued that the St. Louis to New Orleans barge line had been profitable altho saddled with an extravagant overhead. He stated that under Walker D. Hines, director-general of railroads, was Mr. Tomlinson, director of the barge line at a salary of \$25,000 a year, Mr. Sanders for the Mississippi section, \$15,000, and Brent, traffic manager, \$10,000. Tomlinson was from the Great Lakes and he employed a New York yacht builder to design the river barges which were built with screw propellers, and powerful engines, when old rivermen declared stern wheels were more suitable. They were built at a cost of \$305,000, and then the work of the \$25,000 a year manager had to be undone by spending \$60,000 on the alterations to make the boats half way adaptable to the conditions under which they were to operate.

Mr. Newton said: "When they put them in operation they found that the propellers were too small for the engines and the engines would race, so they had to take the propellers off and put on larger propellers. Fortunately there was enough space so they could put them on. When they got them on and put on the power of the engine the rear end of the thing wobbled like a duck's tail, and then after spending \$50,000 or \$60,000 on each one of the towboats they got them properly adjusted; yet they still have difficulties, because they say every once in a while a log gets under and breaks the propeller. To change this difficulty they have changed the propeller blades from steel to bronze."

Walker D. Hines had attained a high reputation as attorney for the Louisville & Nashville Railroad Co. and was easily worth more than \$25,000 in his special field, the law; and Tomlinson, on the Great Lakes, was a valuable man in his proper sphere. It all proves that the less service the government undertakes the better for the groaning taxpayer.

Advocate Perpetual Inventory.

The advantages of a perpetual inventory, together with the explanation of such an adjunct to the accounting system, are set forth in detail in a recent bulletin issued by the Fabricated Production Dep't of the Chamber of Commerce of the United States. Altho designed largely for plants that differ materially in nature from the grain elevator, the general plan has much to commend itself to the grain dealer; and the miller and feed manufacturer will find it of equal interest.

The organization of a plant in the manner suggested in the bulletin is a decided improvement over the burdensome physical inventory at stated periods, and it will prove a valuable aid in adjusting fire losses on work in progress.

WEEVIL BON CAR

Exterminated by
(REG.)

Safe and Sane

Write for Literature and Prices
WEEVIL DEPT.

Henry Heil Chemical Co.
210 So. 4th St. St. Louis, Mo.

HESS

GRAIN DRIERS CONDITIONERS

Moisture Testers
and Accessories

DOCKAGE SIEVES and SCALES

EMERSON KICKERS

Grain Testing and
Sampling Apparatus

Write for free booklet.

HESS WARMING & VENTILATING CO.

907 Tacoma Building
CHICAGO

ACCOUNT
BOOKS

FOR SALE BY
Grain Dealers Journal
CHICAGO

Insurance Field Men at Indianapolis.

The Mill and Elevator Field Men's Ass'n held its 15th annual meeting at the Lincoln Hotel, Indianapolis, Ind., Mar. 14, 15, 16 and 17.

After an address by Pres. L. P. Dendel and the presentation of the treasurer's report Sec'y C. R. McCotter read the minutes of the last meeting and special com'tes were appointed.

W. P. Herod, attorney for the Grain Dealers Fire Ins. Co. then made an address on "What Constitutes Insurable Interest with special reference to Liability for Stored Grain" in which he stated that a warehouseman is liable for loss on grain in all cases unless he has a specific agreement that he will not be liable, written or oral, and if oral provable by witnesses.

If the owner carries his own insurance the warehouseman is liable for carelessness, etc., and the owner's rights may be subrogated by the insurance company.

The courts have held that the receiving of grain for storage even tho there is no charge made in dollars and cents is not a gratuitous act, and therefore the warehouseman is liable.

J. B. Van Voorst of Indianapolis, gave an address on "Elevator Leg Construction" in a general way and later as to its fire hazard. In all of its construction his company is running a ventilating spout from the head of the elevator leg thru the roof of the building. The opening for the ventilator is cut in the top of the head just ahead of the grain discharge point and there is no forced suction, just a natural draft.

F. C. Atkinson, of Indianapolis, in his address on "Spontaneous Combustion" showed that there was such a thing, and particularly that spontaneous combustion of molasses-mixed feeds could occur when conditions were right.

Eugene Arms, Chicago, led a discussion on fumigation. The heat method was favored for mills. Hydrocyanic acid gas was considered next best, but not very successful for elevators on account of the difficulty of confining the gas. No fumigant for grain elevators that satisfies all requirements has yet been offered, but Mr. Arms stated that several chemical companies, among them the Solvay Process Co. and the E. I. DuPont de Nemours Co. are working on the problem.

V. E. Butler, Indianapolis, Ind., with reference to the added hazard due to unprofitable business conditions told the field men what to look out for. Hard times bring up the question of moral hazard. His opinion is that the grain trade has gone thru the hardest part of the depression and that better times are on the way.

E. C. Hach of the Fire Prevention Buro, Chicago, read a paper in which he classified all internal combustion engines and explained their different methods of working. It is presented elsewhere in this number.

Specifications for gravity feed oil engines of the diesel and semi-diesel type are in preparation and have been submitted to the different engine manufacturers to the end that when the specifications finally are adopted they will fit all types of engine.

B. R. Beall, the railroad representative, told of an excelsior packing that has been treated to make it non-combustible.

H. C. Lee of the Fire Prevention Buro, Chicago, made a comparison of building material prices in different parts of the country now and in 1914, with reference to over or under-insurance.

A com'te on proposed changes in the fire insurance schedule was appointed: F. F. Burroughs, Kansas City; J. J. Fitzgerald, Indianapolis; Gleason Allen, Minneapolis; Mr. Pat-ten, Seattle, and F. S. Rexford, Wichita.

Officers elected for the ensuing year are: Pres., Gleason Allen; vice pres., F. F. Burroughs; sec'y, H. C. Lee; treas., C. D. Kellenberger, Alton, Ill.; executive com'te, V. R. Johnson, R. W. Sutherland and Eugene Arms, all of Chicago.

FIELD NOTES.

Next year's meeting will be held at Chicago.

The attendance included 125 men and about 50 ladies.

The theater party on Wednesday evening was enjoyed by everyone.

Each of the ladies was presented with a toothsome box of chocolates by Dilling & Co., of Indianapolis.

All of the social activities were held in the Travertine room of the Lincoln hotel, 14th floor.

The social features were enjoyed by everyone. It was a continual buzz from the start to the finish. The ladies' luncheon at the Spink-Arms started it, followed with the dance at night.

Credit for the success of the entertainment goes to C. B. Sinex, chairman of the com'te on arrangements, who worked hard, one of his clever efforts being a mimeographed pictorial program. He had the pleasure dovetailed in with the business.

The Thursday night banquet, musical program and special features appealed to all, there being none of the old type of entertainment such as cabaret, left a good taste. The entertainers were seated at one end of the hall near the organ. Divans, upholstered chairs and smaller ones gave the appearance of a parlor arrangement. Everything was informal. After the concert the floor was cleared and dancing was enjoyed till midnight.

Insurance Agents and Underwriters Grain Ass'n.

In recent months considerable opposition to the continuance of the Underwriters Grain Ass'n has developed in some parts of the fire insurance field, practically all of it having come about thru activities of local fire insurance agents. The Illinois Ass'n of Insurance Agents, at a recent meeting in Chicago, went on record as requesting that the plan be discontinued, and the Milwaukee Board has expressed itself similarly several times. The same action has been taken by the Wisconsin Ass'n of Insurance Agents, while Minneapolis agents favor its continuance. The Illinois Ass'n appointed a com'te, of which James I. Loeb was chairman, to investigate the situation, and the com'te reported that some managers favor the plan of the Underwriters Grain Ass'n, as do some agents, while some managers are indifferent.

The Underwriters Grain Ass'n was organized during the war, in order to make it possible to provide adequate insurance protection for terminal grain elevators, and this is the only class of business which the Ass'n handles. Under its plan, all companies participate in underwriting each risk, according to a certain agreed percentage, and all terminal elevator insurance of the companies participating in the Ass'n is handled thru the Ass'n. The local agents who originate the business are paid 10% commission, instead of the 15% they received under the old method of individual representation.

The agents profess to see in this plan the danger that other lines of business will ultimately be dealt with in the same way by insurance companies, thus tending toward too much centralization.

On the other hand, many officials of fire insurance companies favor the plan whole heartedly. One such official recently said that service to policyholders is the first consideration, that the Ass'n can render better service than was rendered under the old method of writing the business, and that owners of terminal elevators are much better satisfied with the present arrangement.

In support of this position, it is interesting to note that the Terminal Elevator Grain Merchants Ass'n recently took action requesting that the Underwriters Grain Ass'n be continued.

The insurance official quoted pointed out that local agents can now bind even the largest line without delay, whereas under the old system it

was frequently necessary for an agent to telegraph all over the country in an effort to obtain insurance for one of his clients, and occasionally he failed in getting the necessary coverage. He said, also, that there have been cases where the local agent has received an order for insurance, and has told the client the coverage had been obtained, only to find it necessary later to admit to the client that certain companies had refused to issue the policies he expected. This left the client without ample insurance; and if a fire were to occur at such a time it might put the elevator operator in a very embarrassing position.

The commission side of the question seems to be of paramount importance, and to be largely the factor that has influenced the agents to take their present stand. In this connection, the insurance official declared it to be his opinion that local agents are actually making more money out of the 10% they get from the Ass'n than they made out of the 15% the individual companies paid them previously. He based this statement on the fact that now an agent is able to obtain coverage on all the business he originates, incurring less expense in getting it; and that 10% on a large volume is better than 15% on a lesser volume. Moreover, it is only necessary for the agent to represent one company which has membership in the Ass'n to have at his disposal all the writing capacity of the entire membership of the Ass'n.

The rigid inspection service which was instituted at the time the Ass'n was organized has been maintained thruout its life, and this is of great importance. The service has undoubtedly been more efficient than the inspections of former times, and in all probability this has served to reduce materially the fire losses.

Insurance Notes.

FIRE LOSSES thruout the United States and Canada during February totaled \$29,304,300, an increase of \$3,145,450 when compared with the reported losses during February, 1921.

LANSING, MICH.—Mar. 29 has been named by Gov. Groesbeck as the date for a final hearing on fire insurance rates in Michigan. Methods to be used in applying the standard schedule will also be considered.

A HEARING will be held Apr. 25 by Fire Commissioner McMurray, of Indiana, on the request of owners of fireproof property for a reduction of 50% in the rates for fire insurance on all fireproof property in that state.

A BULLETIN sent out recently by the National Fire Protection Ass'n makes the statement that the fire losses of 1921 exceeded that of any previous year in the history of the United States, and that, while final figures are not available, the total will be more than half a billion dollars. Fire losses have increased steadily, year after year, in spite of the development of fire fighting science and equipment and fire protection engineering. More than 75% of the losses are classed as preventable.

A DUST EXPLOSION in the plant of the Midland Milling Co., Kansas City, Mo., on Mar. 15 caused slight damage and made it necessary to shut down the plant to make repairs. It is thought to have been caused by the passage of some foreign object thru the rolls, which are on the 4th floor. The principal damage was on the 8th floor, where the dust collectors are located. Steel window sashes on the 8th floor were blown out, and the dust box above the collectors was ignited, but the flames were quickly extinguished. No employees were hurt.

STOCKHOLDERS of the Hartford Fire Ins. Co., at a special meeting held recently, adopted resolutions to increase the capital stock of the company from \$4,000,000 to \$8,000,000. The resolutions provide for the issuance of 40,000 additional shares of the par value of \$100, to be offered to stockholders of record Mar. 8, one share for each share held. Assets of the company have increased from \$26,000,000 in 1915 to \$56,000,000 in 1922. In the same period the policyholders' surplus has grown from \$9,000,000 to \$18,000,000, and the net surplus from \$7,000,000 to \$13,000,000.

Western Grain Dealers Mutual Fire Insurance Company

DES MOINES, IOWA

J. A. KING, President Geo. A. WELLS, Secretary

Write for Information Regarding Short Term Grain Insurance

TORNADOES

March to September are the months of greatest tornado frequency in the states east of the Rocky Mountains. No place in that section is safe from the lash of this monster.

Don't wait until the last moment to look after your tornado insurance. Write us now. A "Grain Dealers Mutual" Complete Windstorm policy for \$10,000 costs less than Five Cents a Day.

C. R. McCOTTER

Western Manager
Omaha, Nebraska



C. A. McCOTTER

Secretary
Indianapolis, Ind.

Tri-State Mutual Grain Dealers' Fire Insurance Company LIVERNE, MINN.

Average return for 20 years, 50% of the Deposit Premium.
Provisional and Short Term Grain Insurance.

We write Tornado Insurance.

E. H. Moreland, Secretary

THE MILL MUTUAL

Fire Insurance Companies have paid \$1,150,769.00 for Fire Loss caused directly by

LIGHTNING

during the past twelve years.

NOT ONE LOSS has been reported on a building having APPROVED LIGHTNING PROTECTION.

The insurance saving on a flour mill or grain elevator makes the protection of the property a sound business proposition.

Spring and the season of Lightning Losses is here. Act today.

Ask for our Installation Specifications.

Mutual Fire Prevention Bureau

230 East Ohio Street

Chicago, Illinois

If you look for profits
from your live stock
—be sure to insure



The
Seal of Certainty

*Insure them
before you
put them in
the car for
market by
getting
Transit Live
Stock Insur-
ance in the
Hartford Fire
Insurance Co.
that will
pay your loss.*

South St. Paul, Minn., Tells The Same Old Story

One day's record shows 2000 cattle, 7769 hogs and 200 sheep received. Out of which 6 cattle, 345 hogs and 1 sheep were killed or injured. Loss ran heavy for only 18% were insured. Play safe yourself.

For full information and rates get in touch with the local manager of the Hartford Fire Insurance Company at point of destination or write to the

Hartford Fire Insurance Co.

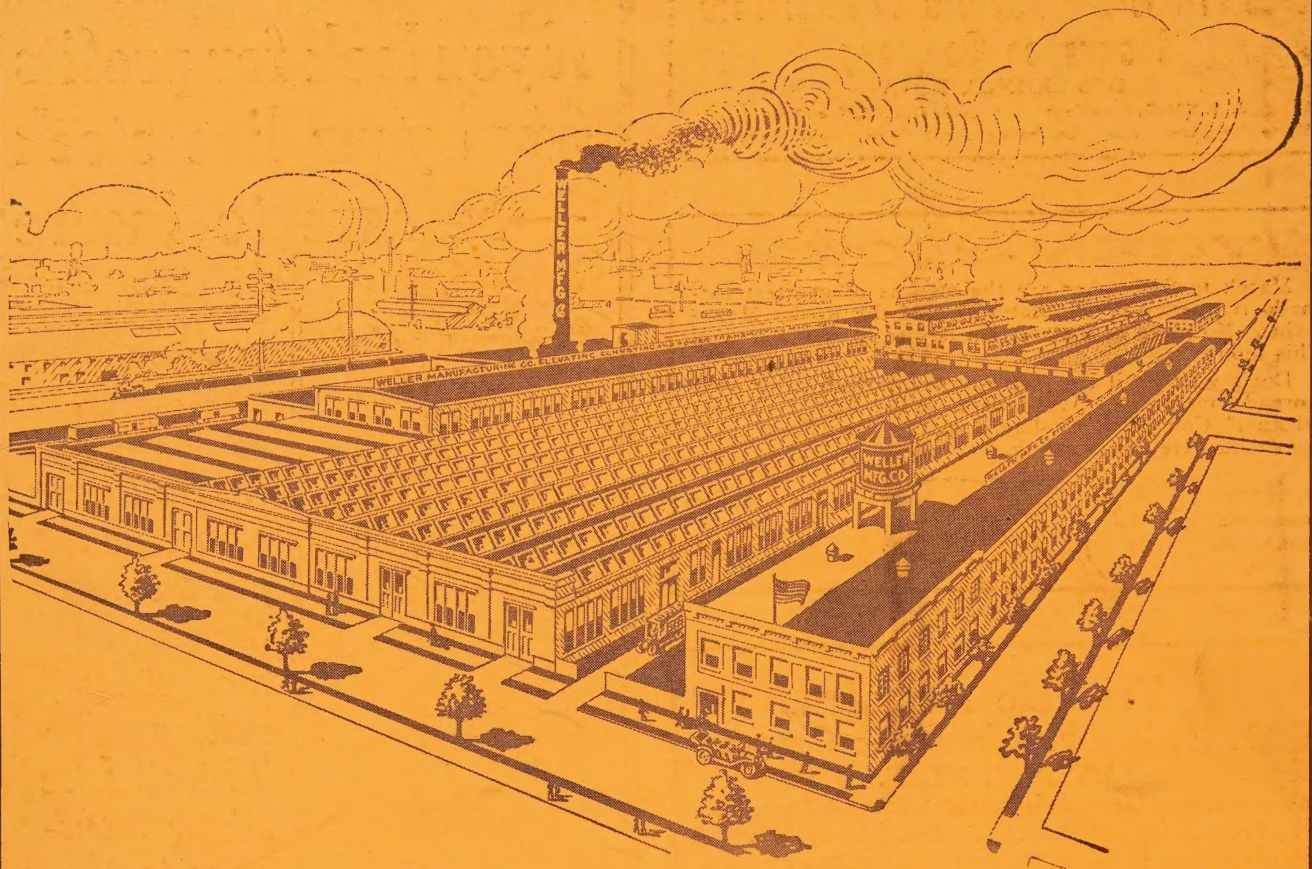
Live Stock Department

39 So. La Salle St.

Chicago, Ill.

The **GRAIN DEALERS** JOURNAL.

"The Plant Behind the Product"



Modern Equipment for Grain Elevators

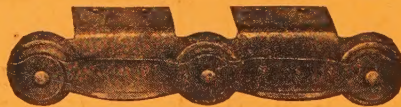
Elevating, Conveying and Power Transmitting Machinery

Belt Conveyors	Elevator Heads	Car Loaders
Spiral Conveyors	Distributing Spouts	Car Unloaders
Bucket Elevators	Grain Driers	Car Pullers
Elevator Buckets	Power Shovels	One Man Elevators
Elevator Casings	Wagon Dumps	Bin Gates
Rope Drives, Pulleys, Hangers, Bearings, Friction Clutches, Gears, Etc.		



This Stamp
on Steel Chain
Insures Service.

Weller-Made Steel Bushed Chain



With Case Hard-
ened Bushings.
A Chain to Meet
Your Require-
ments. Write Us.



WELLER MFG. CO.

CHICAGO

New York
Boston

Baltimore
Pittsburgh

San Francisco
Salt Lake City

